



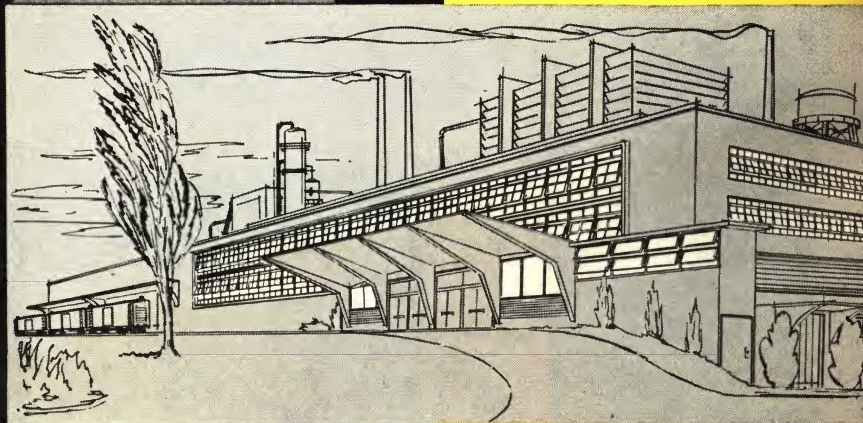
## ALUMINUM WINDOWS

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GLASS BLOCK



AWNING

AWNING  
HOPPER

SELECT-  
A-VENT

JALOUSIE

CASEMENT

HOPPER

DOUBLE  
HUNG

PROJECTED

PIVOTED

UTILITY



RANCH  
WALL



HORIZONTAL  
SLIDING

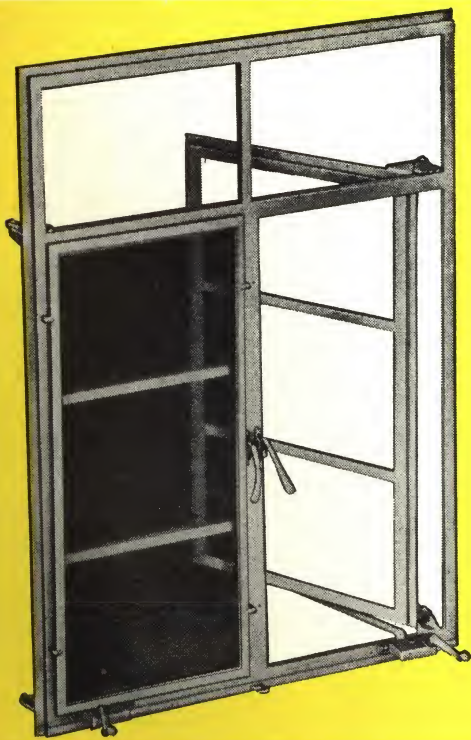


BASEMENT

TWINSUL

**SOUTHERN SASH SALES AND  
SUPPLY COMPANY, INC.**  
SHEFFIELD, ALABAMA





Ualco Aluminum Windows install easily and economically, require no upkeep, and add beauty and sales appeal to increase the resale and rental value for the life of the structure.

Their lifetime, natural, aluminum neatness harmonizes with any type construction. Muntins and frames are designed narrow for large, modern windows without lost strength. Drafts and ventilation are instantly controlled. Screens and storm sashes are easily installed on the room side of the casement window.

Made of top quality extruded aluminum, Ualco windows cannot rust, rot, split or warp. They have a permanent satin-smooth finish. They withstand corrosion, damp and heat . . . never need scraping or painting. Economical. Lightweight.

## SPECIFICATIONS

**GENERAL**—Types and sizes shown herein are windows as manufactured to the plans and specifications listed below by Union Aluminum Company, Inc., Sheffield, Alabama.

**MATERIAL**—Ualco Lifetime Aluminum Casement Windows shall be of solid extruded aluminum alloy 6063-T5 mill finish of not less than 22,000 lbs. per square inch tensile strength. Frame members shall not be less than 3/32" in thickness and not less than 1/8" thickness at all weathering and outside edges. Ventilator members and muntins shall not be less than 1/8" thickness.

Frame and vent members shall not be less than 1" in depth.

**CONSTRUCTION**—Ualco Lifetime Aluminum Casement Windows shall be electrically flash welded at all frame and vent corners. Muntins shall be firmly attached to their cross joints and their abutting sash sections. Windows with transoms shall have an integral rain drip extruded in the transom member. Window without transoms, upon request can be furnished with a separate rain drip, shipped loose and to be applied to the top member of the window frame prior to installation.

**HARDWARE**—Ualco Lifetime Aluminum Casement Window shall be equipped with die cast Rotary type underscreen operator with aluminum lacquer finish, also die cast locking handles with aluminum lacquer finish.

Ualco Lifetime Aluminum Casement Window ventilators shall be attached to the frame with *aluminum truss type hinges*, riveted securely to both ventilator and frame.

Fins, trim fins, brick mould, and a variety of anchor clips furnished at additional cost.

**NOTE:** Where desired for building into masonry wall, fins or other anchoring accessories are to be given one coat of bituminous asphalt paint at points of contact with the masonry wall. This painting is furnished by others.

**SCREENS**—Shall be extruded or rolled aluminum frame members mitered at the corners and joined by a concealed aluminum corner angle. Screen cloth shall be 18/14 mesh aluminum wire, held in place by aluminum splines or other satisfactory material.

**STORM SASH**—Available on request.

## FEATURES OF UALCO CASEMENT WINDOWS



**EASE OF OPERATION**—Trouble-free. Open easily, close tightly. Cannot warp, swell or stick. They will never be "painted shut."



**100% VENTILATION**—Open completely to give complete ventilation. Slender frames and muntins provide greater "openness" for maximum light and view.

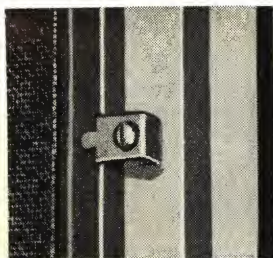


**GREATER WALL SPACE**—Because of more light area and narrow frames, more useable wall space is made available through Ualco Casements.

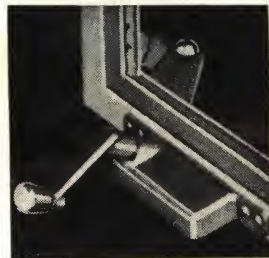


**EASY SCREENING**—Ualco Casements do away with outside weather beaten screen and ladder climbing. Screens slip in easily on inside; also storm sash.

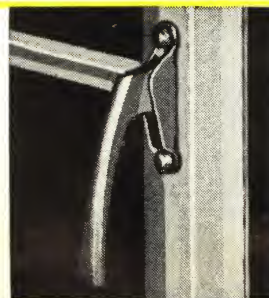
## HARDWARE



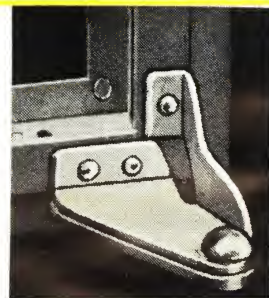
Attachment for securing the screen or storm sash to inside of casement window.



Rotary operator, underscreen type. Lacquered die cast aluminum.



Easy action locking handle . . . lacquered die cast aluminum.



Truss-type self cleaning hinge, riveted to frame and ventilator.





# ALUMINUM CASEMENT WINDOWS

5a  
Un

★ THE DIMENSIONS SHOWN  
ARE OVER ALL

CODE

FIRST NUMBER INDICATES (LIGHTS WIDE)  
SECOND NUMBER INDICATES (LIGHTS HIGH)  
THIRD NUMBER INDICATES (NO. OF VENTS)  
FOURTH NUMBER INDICATES (NO. LIGHTS IN EACH VENT)

## STANDARD SIZES

GLASS SIZES			1'-7 1/4"	1'-11 1/4"	3'-1"	3'-9 1/4"	3'-1"	3'-9 1/4"	4'-5 1/4"	5'-9 1/4"	7'-1 1/4"	8'-5 1/4"	2'-2"
	WIDTH	HEIGHT											
1	15 3/4"	11 1/4"	1212	1212W	2212	2212W	2222	2222W	3222	4222	5222	6222	3311F
2	15 3/4"	12"											
3	17 1/4"	12"	1313	1313W	2313	2313W	2323	2323W	3323	4323	5323	6323	
4	17 1/4"	12 1/4"											
5	15 3/4"	12 1/4"											
6	21 1/4"	12"											
7	21 1/4"	12 1/4"	1414	1414W	2414	2414W	2424	2424W	3424	4424	5424	6424	
8	19 3/4"	11 1/2"											
9	19 3/4"	12"											



GLASS SIZES			1'-4"	2'-0"	2'-8"	3'-4"	2'-8"	3'-4"	4'-0"	5'-4"	6'-0"	8'-0"
	WIDTH	HEIGHT										
1	12 3/4"	10 1/4"	B-1212	B-1212W	B-2212	B-2212W	B-2222	B-2222W	B-3222	B-4222	B-5222	B-6222
2	13 1/4"	10 1/4"										
3	17 1/4"	10 1/4"	B-1313	B-1313W	B-2313	B-2313W	B-2323	B-2323W	B-3323	B-4323	B-5323	B-6323
4	20 3/4"	10 1/4"										
5	15"	11"										
6	19"	11"										
7	19"	11 1/2"										
8	14 3/4"	11 1/2"	B-1414	B-1414W	B-2414	B-2414W	B-2424	B-2424W	B-3424	B-4424	B-5424	B-6424
9	15 3/4"	11"										
10	15 3/4"	11 1/4"										
11	13"	11"										
12	13"	11 1/4"										
13	12 3/4"	10 1/2"	B-1413	B-1413W	B-2413	B-2413W	B-2423	B-2423W	B-3423	B-4423	B-5423	B-6423
14	12 3/4"	11 1/4"										
15	13 1/4"	10 1/2"										
16	13 1/4"	11 1/4"										
17	17 1/4"	10 1/2"										
18	17 1/4"	11 1/4"										
19	20 3/4"	10 1/2"	B-1514	B-1514W	B-2514	B-2514W	B-2524	B-2524W	B-3524	B-4524	B-5524	B-6524
20	20 3/4"	11 1/4"										
21	14 1/4"	11 1/2"										
22	22 1/4"	11 1/2"										

VARIATIONS—Arrangement of muntins and mullions of Standard and Modular Ualco Casement Windows provides many varia-

tions of designs to conform to all types of architectural requirements. NOTE: Always use Ualco catalog numbers and legend.



4524 PC



44 Fixed



44P



34HMO

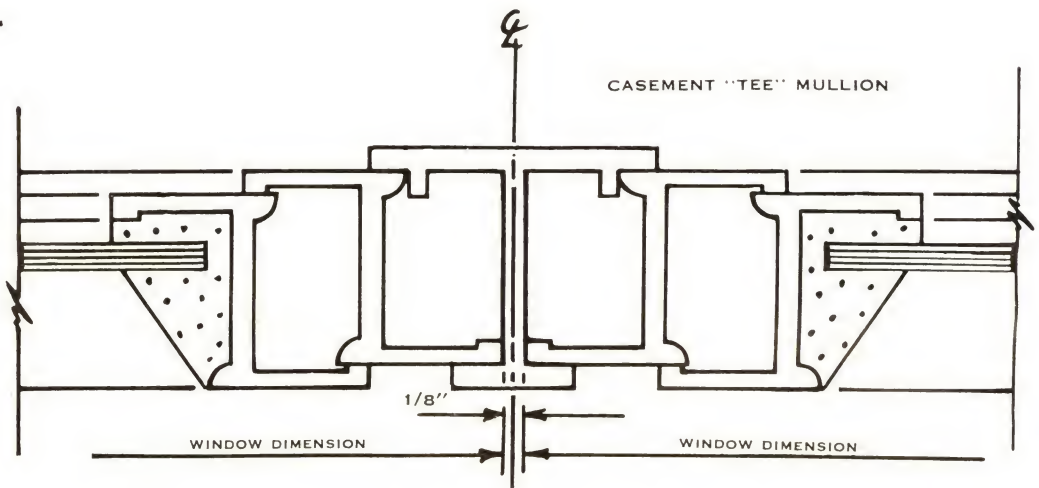
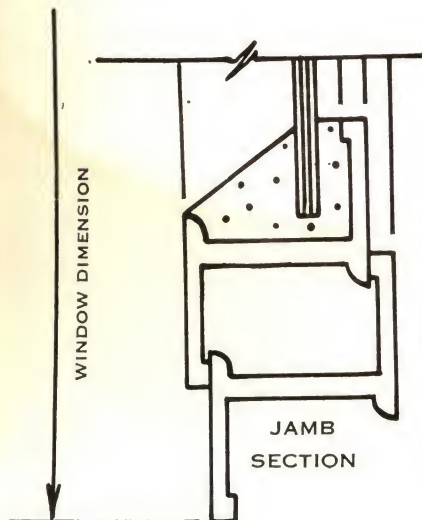
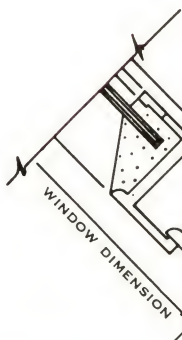
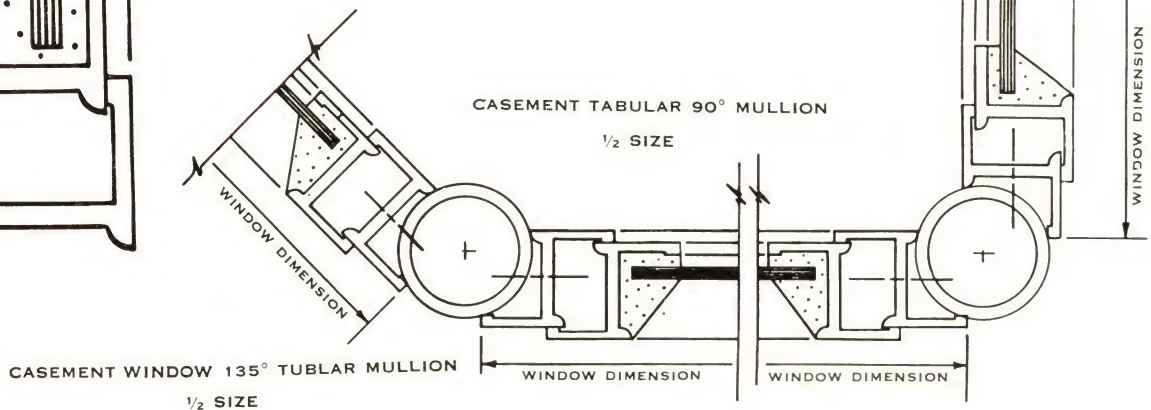
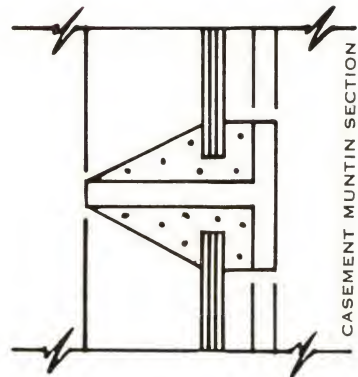
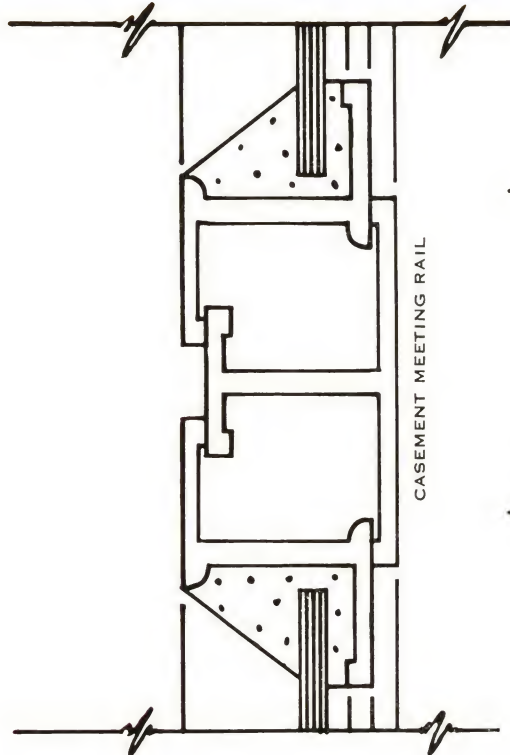
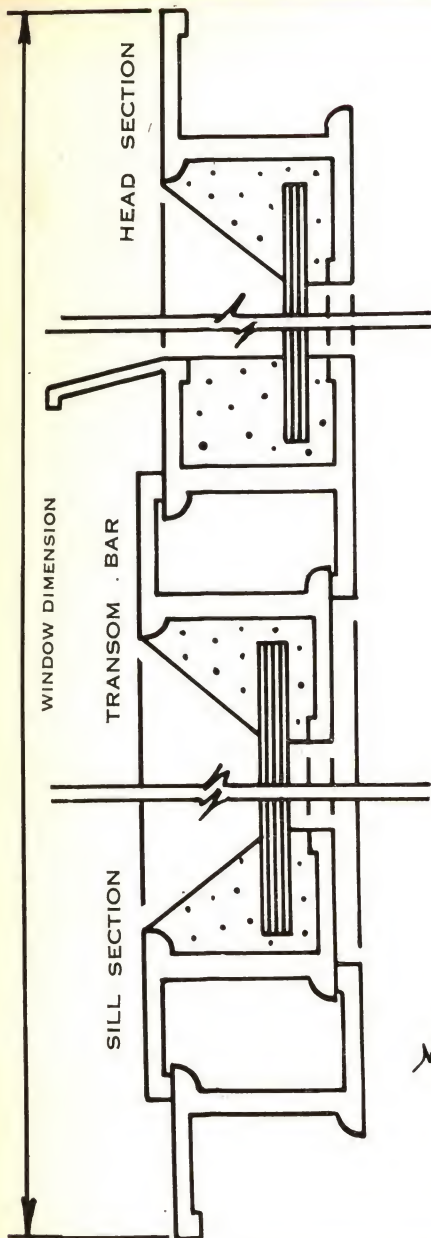


3423



3423 CMO



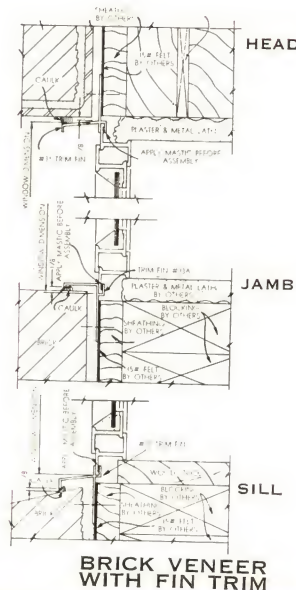
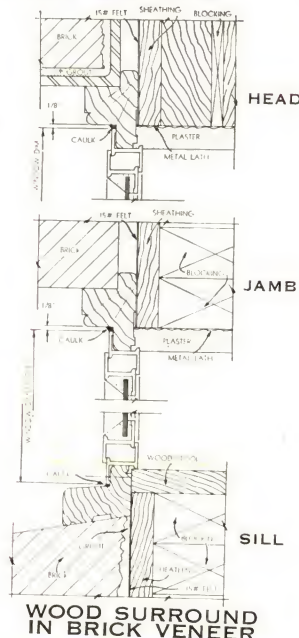
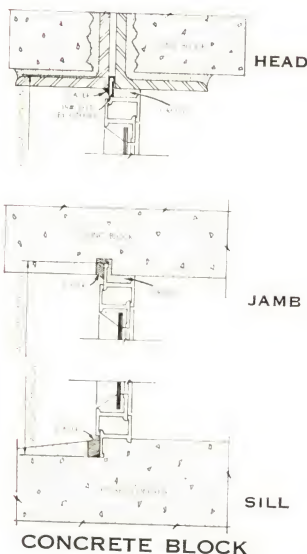
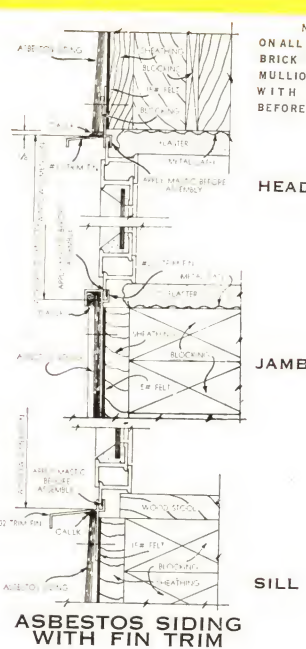
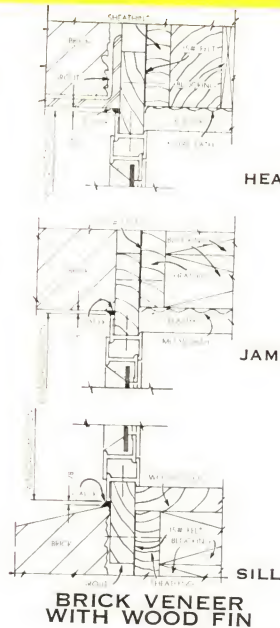
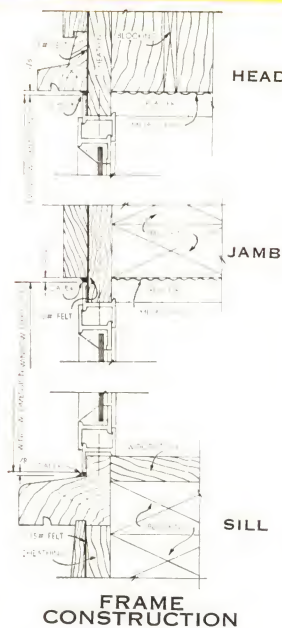




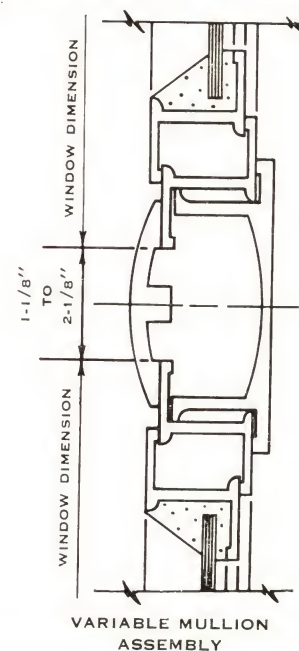
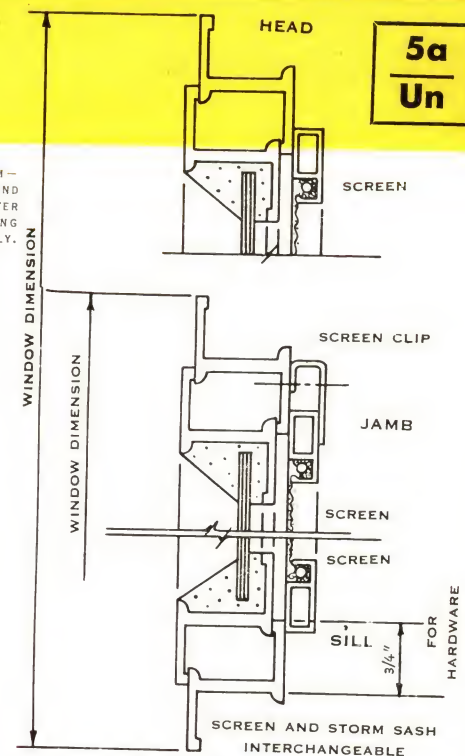


# ALUMINUM CASEMENT WINDOWS

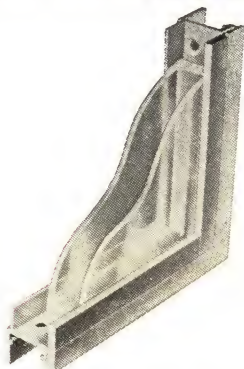
## INSTALLATION DETAILS



NOTE:  
ON ALL FINETRM -  
BRICK MOULD AND  
MULLION - BUTTER  
WITH CAULKING  
BEFORE ASSEMBLY.



**TWINSUL** →  
double glazed units  
for picture windows  
and window walls



frame no.	glass size		frame size overall		frame no.	glass size		frame size overall	
	width	height	width	height		width	height	width	height
D.G. 10	48 1/2"	46"	51 1/4"	48 3/4"	D.G. 260	96"	72"	98 3/4"	74 3/4"
D.G. 20	56 1/2"	46 1/8"	59 1/4"	48 7/8"	D.G. 270	46 1/8"	52 1/2"	48 7/8"	55 1/4"
D.G. 30	72 1/2"	46"	75 1/4"	48 3/4"	D.G. 280	58 1/8"	52 1/2"	60 7/8"	55 1/4"
D.G. 40	48 1/2"	50"	51 1/4"	52 3/4"	D.G. 290	70 1/8"	52 1/2"	72 7/8"	55 1/4"
D.G. 50	56 1/2"	50"	59 1/4"	52 3/4"	D.G. 300	46 1/8"	56 1/2"	48 7/8"	59 1/4"
D.G. 60	64 1/2"	50"	67 1/4"	52 3/4"	D.G. 310	58 1/8"	56 1/2"	60 7/8"	59 1/4"
D.G. 70	72 1/2"	50"	75 1/4"	52 3/4"	D.G. 320	70 1/8"	56 1/2"	72 7/8"	59 1/4"
D.G. 80	80 1/2"	50"	83 1/4"	52 3/4"	D.G. 330	35 1/2"	36"	38 1/4"	38 3/4"
D.G. 90	96 1/2"	50"	99 1/4"	52 3/4"	D.G. 340	48"	48"	50 3/4"	50 3/4"
D.G. 100	64 1/2"	58"	67 1/4"	60 3/4"	D.G. 350	72"	48"	74 3/4"	50 3/4"
D.G. 110	72 1/2"	58"	75 1/4"	60 3/4"	D.G. 360	35 1/2"	48 1/8"	38 1/4"	50 7/8"
D.G. 120	80 1/2"	58"	83 1/4"	60 3/4"	D.G. 370	55 1/4"	48 1/8"	58"	50 7/8"
D.G. 130	96 1/2"	58"	99 1/4"	60 3/4"	D.G. 380	75"	48 1/8"	77 3/4"	50 7/8"
D.G. 140	116 1/2"	58"	119 1/4"	60 3/4"	D.G. 390	48"	60"	50 3/4"	62 3/4"
D.G. 150	56 1/2"	66"	59 1/4"	68 3/4"	D.G. 400	72"	60"	74 3/4"	62 3/4"
D.G. 170	72 1/2"	66"	75 1/4"	68 3/4"	D.G. 410	35 1/2"	60 3/8"	38 1/4"	63 1/8"
D.G. 180	42"	66"	44 3/4"	68 3/4"	D.G. 420	55 1/4"	60 3/8"	58"	63 1/8"
D.G. 200	42"	72"	44 3/4"	74 3/4"	D.G. 430	75"	60 3/8"	77 3/4"	63 1/8"
D.G. 220	84"	66"	86 3/4"	68 3/4"	D.G. 34	50 3/8"	47 7/8"	53 1/8"	50 3/8"
D.G. 230	84"	72"	86 3/4"	74 3/4"	D.G. 35	50 3/8"	60 1/4"	53 1/8"	63"
D.G. 240	64 1/2"	66"	67 1/4"	68 3/4"	D.G. 44	66 5/8"	47 7/8"	69 3/8"	50 5/8"
D.G. 250	96"	66"	98 3/4"	68 3/4"	D.G. 45	66 5/8"	60 1/4"	69 3/8"	63"

Note: Frame Size is outside dimensions. Only Nos. 34, 35, 44, 45 adaptable to standard Ualco casements by millions.



## SPECIFICATIONS

**GENERAL**—Types and sizes shown herein are windows as manufactured to the plans and specifications listed below by Union Aluminum Company, Inc., of Sheffield, Alabama.

**MATERIAL**—UALCO hopper vent windows shall be made of especially designed solid extruded aluminum shapes of not less than 3/32" thickness, frames being made of Zee sections which are 1" in depth and 1/8" in cross section.

All UALCO hopper vent windows are fabricated from aluminum of a special alloy of not less than 22,000 pounds of tensile strength per square inch. This alloy is to be 6063-T5, corners are electrically flash-welded, mortised, tenoned and swedged.

**SCREENS**—Aluminum screens made from either extruded or rolled sections and mesh aluminum wire complete with all attaching fixtures and obtainable from either manufacturer or dealer.

**STORM SASH**—Available on request.

- Draft-free, controlled ventilation is important in hospitals and schools and is an asset to personal comfort in all residential, commercial, public and apartment buildings.

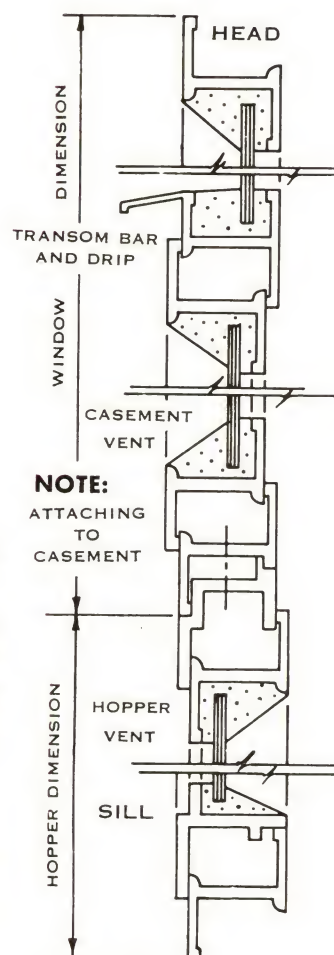
For any type construction, for any mode decoration . . . specify UALCO Lifetime Aluminum Hopper Windows for maximum draft-free, rain-free ventilation control. Hoppers are easily opened, regulated and closed.

UALCO hopper vents are manufactured from extruded solid aluminum sections. Their beautiful satin-smooth finish resists decay and corrosion for the life of the building . . . without maintenance costs. No painting. No scraping.

## HOPPER VENT SECTION

### DETAILS

SCALE 1/2 SIZE



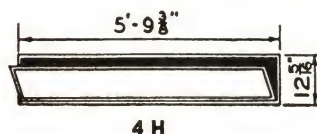
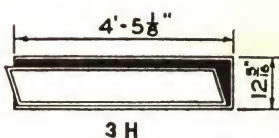
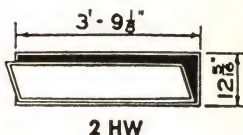
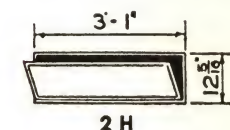
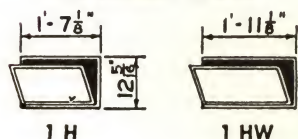
### NOTE:

ATTACHING TO CASEMENT

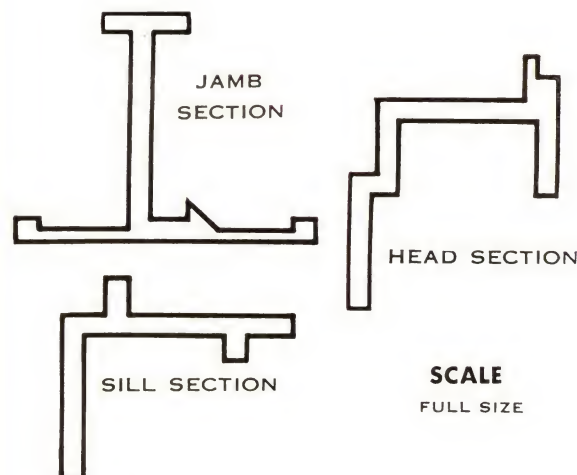
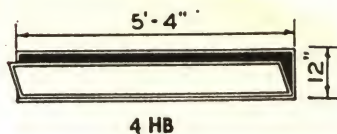
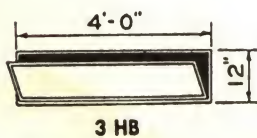
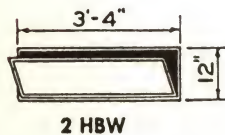
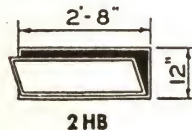
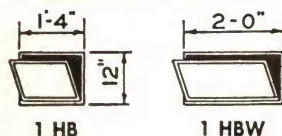
HOPPER VENT  
HOPPER DIMENSION

## SELF-MULLING CASEMENT WINDOW WITH HOPPER

### STANDARD SIZES



### MODULAR SIZES



UALCO HOPPER VENT WINDOWS are adaptable to all types of construction. Factory installed hardware assures positive holding at any ventilation setting. Locking handles are white Bronze with clear lacquer finish.



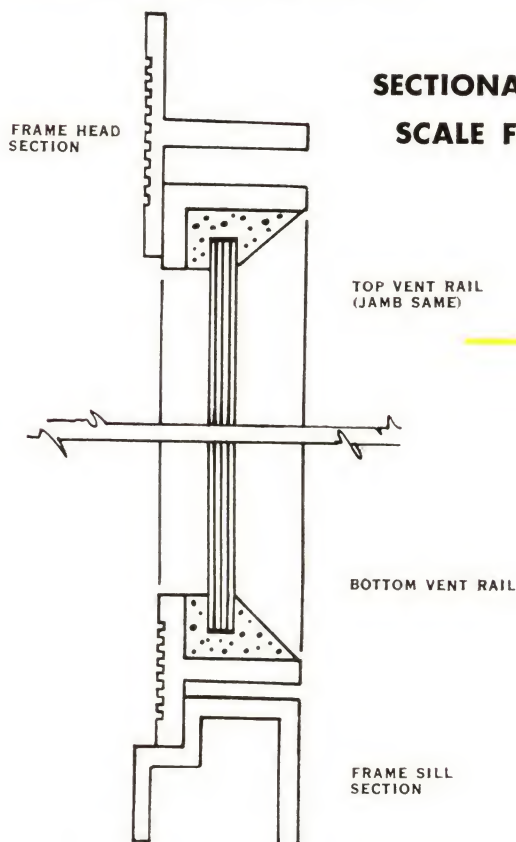


# ALUMINUM BASEMENT WINDOWS

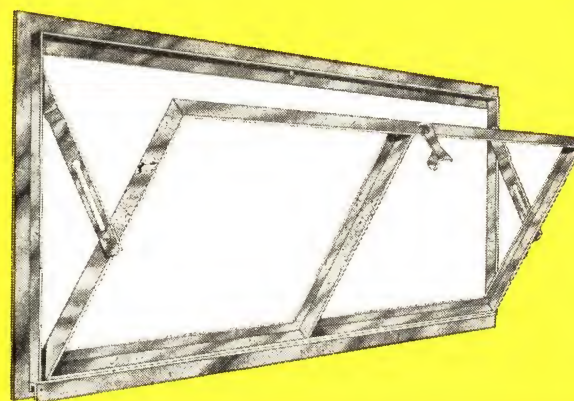
★ Aluminum Screens and Storm Sash Available

5a  
Un

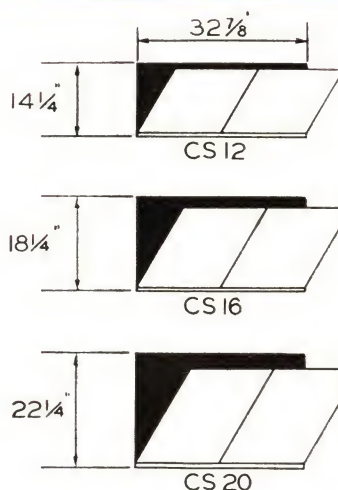
For basement windows, specify low cost Ualco. Tops for economy in glazing . . . for 100% ventilation . . . for economy in installation. Require no maintenance. First cost is last cost.



SECTIONAL DETAILS  
SCALE FULL SIZE



Ventilator Removable From Frame—Easy To Replace



## GLASS SIZES

2—15" x 12"

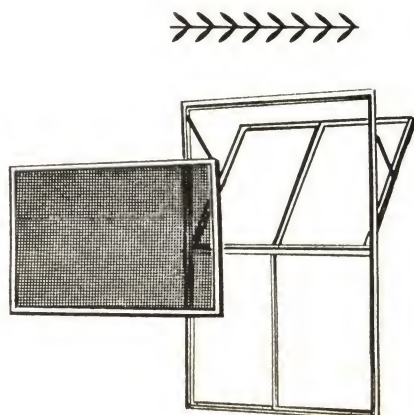
2—15" x 16"

2—15" x 20"

## ★ ★ UALCO ALUMINUM UTILITY WINDOWS ★ ★

Especially designed for low cost window requirements in public and private garages, shops, warehouses, farm buildings, filling stations. Provides trim appearance, ventilation, convenience and sanitation at minimum cost.

SECTIONAL DETAILS SAME AS BASEMENT



Screen and  
storm sash available

### Sizes

GLASS OPENING SECTION

(2) 15" x 20"

FIXED SECTION

(2) 15 5/8" x 20"

WINDOW HEIGHT

42 5/8"

WIDTH

32 7/8"





## SPECIFICATIONS

**GENERAL:** Ualco Double Hung windows shall be assembled with sash hung and adjusted, ready for shipment as a unit. Frame and sash members are to be fitted together in such a manner as to form a weather tight joint. Window types and sizes shown herein as furnished by Union Aluminum Co., Inc., Sheffield, Alabama.

**MATERIAL:** Ualco Double Hung frame head and jamb members shall not be less than .062 in thickness. Sill member shall not be less than .062 thickness.

Vent sash members shall not be less than .062 in thickness and .125 thickness.

Ualco Double Hung windows shall be of especially designed extruded aluminum shapes of 6063-T5 alloy having a tensile strength of not less than 22,000 P. S. I.

**CONSTRUCTION:** Ualco Double Hung windows shall be assembled at each corner with 2 #10 sheet metal screws. Where two or more members are to be installed in a single opening provisions shall be made to assemble the abutting frame members into a structurally satisfactory vertical mullion.

Ualco Double Hung windows shall have an integral fin 3/4" long extruded on the jamb section and on the head section. No anchor clip necessary in the jamb or head section unless specified. Anchor clips are used at the sill section if specified.

**SASH:** The sash shall be assembled at all corners with #10 sheet metal screws.

**MUNTINS:** Muntins shall be firmly attached to the sash. All cross sections shall be accurately made and mechanically joined at the intersections.

**WEATHERSTRIPPING:** All vertical weatherstripping shall be of stainless steel and securely fastened to the jamb of sash.

All horizontal weatherstripping, head, meeting rail and sill shall be of koroseal or vinyl.

**HARDWARE:** Each lower sash shall be equipped with an integrally extruded lift. All top sash shall be equipped with pull handle or handles secured to the bottom of the top sash. Each window shall be equipped with crescent fastener and strike. Each window shall be equipped with four spiral sash balance of adjustable type.

**FINISH:** The exposed surfaces of all aluminum frames and sash shall be cleaned to make them uniform in color and free from scratches and other surface blemishes.

**PROTECTIVE COATING:** A suitable protective lacquer finish shall be applied to all frame and sash members after fabrication.

**SCREENS:** Screens frame shall be extruded aluminum alloy 6063-T5 and angle corner reinforced. Wire cloth shall be 18 x 14 mesh and shall be secured in place by aluminum spline or other material adaptable to aluminum. Screens spline shall be removable for rewiring.

Screens shall be inserted in recess provided on the outside of the window. No mounting screws necessary. Screen removable from the inside.

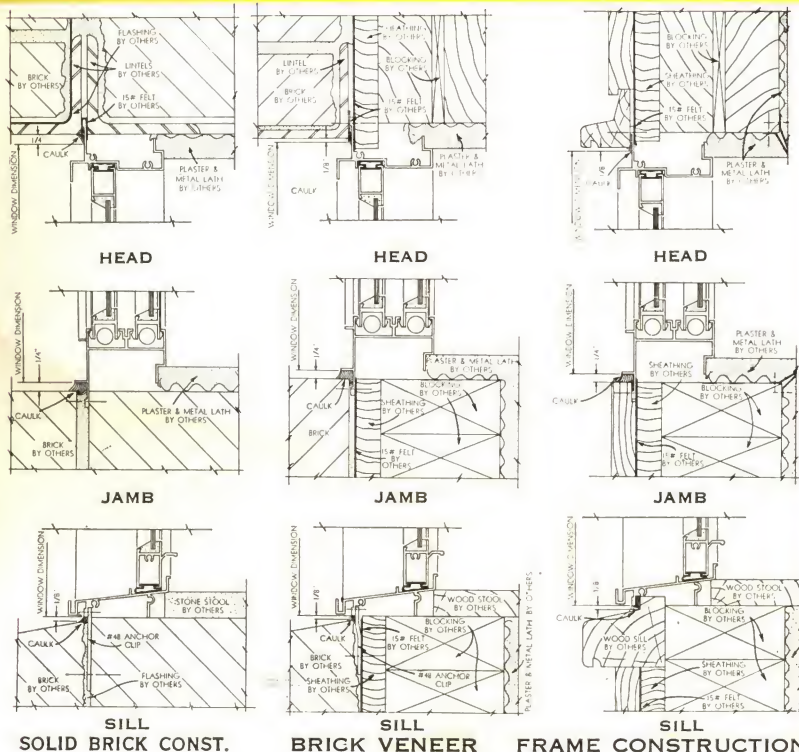
**ERECTION:** (Included Under Another Contract)

Erect window in proposed opening according to manufacturers drawings. Windows must be set plumb and level. Operating parts must be kept clean from plaster, stucco and other foreign matters.

At no time shall window be forced through an opening which is too small or installed in an opening that is too large. Jamb sections must not be twisted or distorted.

UALCO Aluminum Double Hung Windows will not flex—will neither bind nor permit air leaks—unless structural changes occur in the building itself. They incorporate all the features proven desirable by test installations subjected to severe weather and strain conditions. Available in a choice of standard and special sizes, and in the muntin arrangement that most suits your building design.

**HARDWARE** — The sash lock shown at left offers protection against forced entry, and locks the window tight against strong winds. Hardware on all UALCO Lifetime Aluminum windows is stainless steel for long service life. Aluminum screens are available from Union Aluminum Company and their dealers. Storm sashes are available on request.



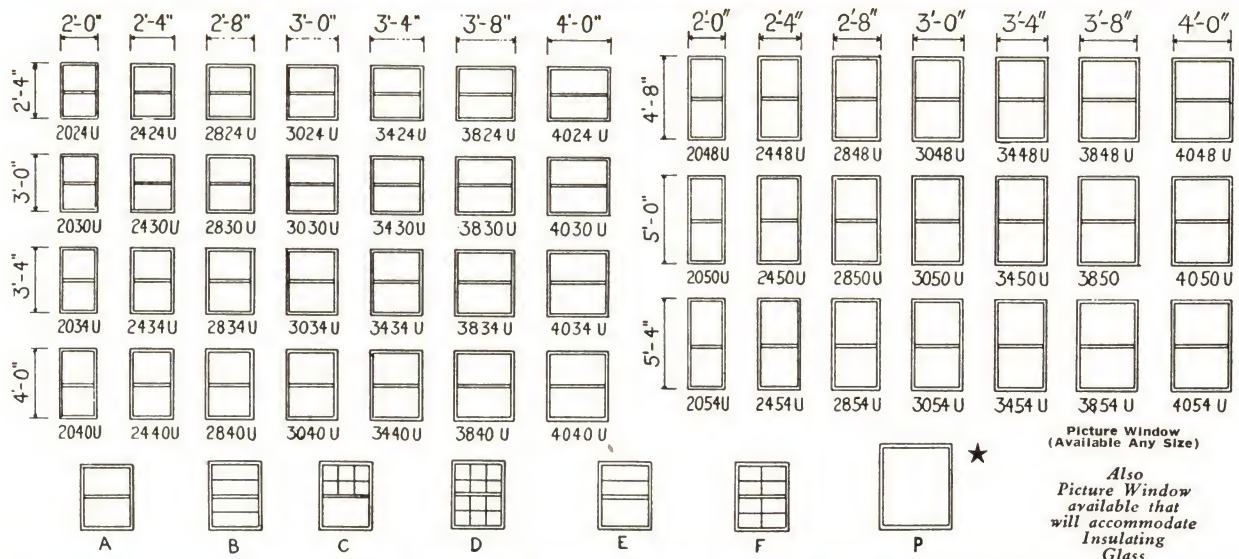
INTEGRAL FIN completely surrounds window

FRAME RIGIDITY is built-in to give maximum strength

SCREEN SLOT is built-in — an integral part of window

WEATHERSTRIPPED with Stainless Steel and Koroseal Built-in insulation make Ualco Double Hung Windows draft-free, dust-free.





Note: Upper and lower sash have same glass sizes.

## GLASS SIZES

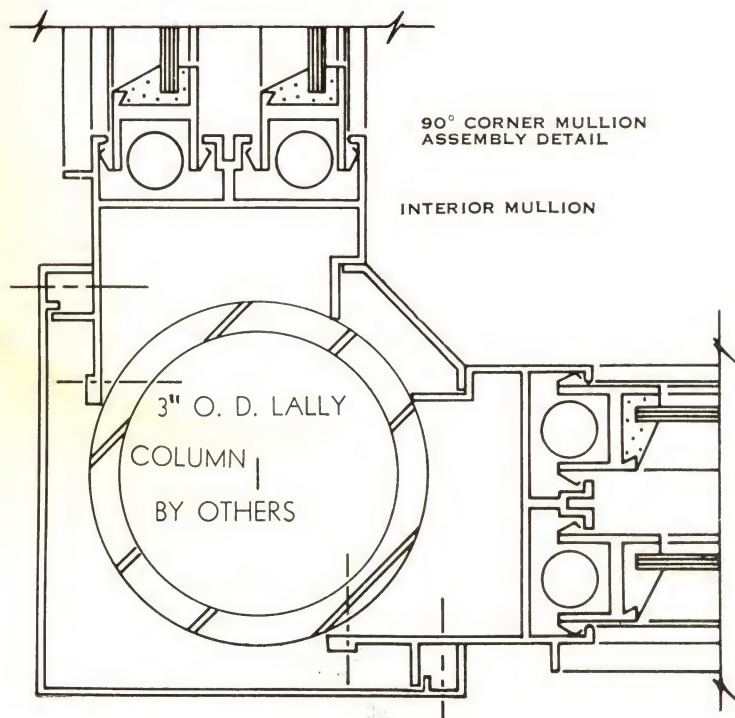
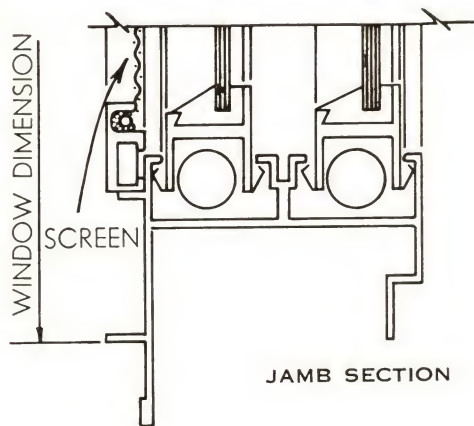
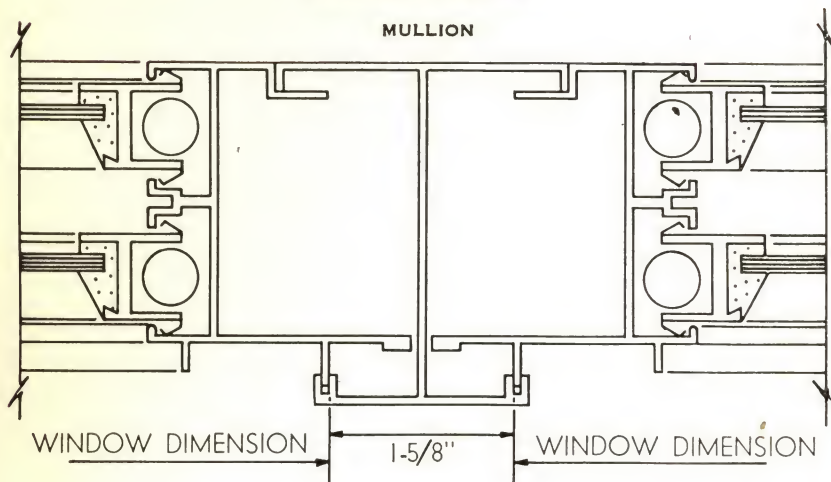
Sizes	1 Light Sash	2 Light Sash	4 Light Sash	6 Light Sash	8 Light Sash
2024	20" x 11-1/2"	20" x 5-5/8"	9-3/4" x 5-5/8"		
2030	20" x 15-1/2"	20" x 7-5/8"	9-3/4" x 7-5/8"		
2034	20" x 17-1/2"	20" x 8-5/8"	9-3/4" x 8-5/8"		
2040	20" x 21-1/2"	20" x 10-5/8"	9-3/4" x 10-5/8"		
2048	20" x 25-1/2"	20" x 12-5/8"	9-3/4" x 12-5/8"		
2050	20" x 27-1/2"	20" x 13-5/8"	9-3/4" x 13-5/8"		
2054	20" x 29-1/2"	20" x 14-5/8"	9-3/4" x 14-5/8"		
2424	24" x 11-1/2"	24" x 5-5/8"	11-3/4" x 5-5/8"	7-3/4" x 5-5/8"	
2430	24" x 15-1/2"	24" x 7-5/8"	11-3/4" x 7-5/8"	7-3/4" x 7-5/8"	
2434	24" x 17-1/2"	24" x 8-5/8"	11-3/4" x 8-5/8"	7-3/4" x 8-5/8"	
2440	24" x 21-1/2"	24" x 10-5/8"	11-3/4" x 10-5/8"	7-3/4" x 10-5/8"	
2448	24" x 25-1/2"	24" x 12-5/8"	11-3/4" x 12-5/8"	7-3/4" x 12-5/8"	
2450	24" x 27-1/2"	24" x 13-5/8"	11-3/4" x 13-5/8"	7-3/4" x 13-5/8"	
2454	24" x 29-1/2"	24" x 14-5/8"	11-3/4" x 14-5/8"	7-3/4" x 14-5/8"	
2824	28" x 11-1/2"	28" x 5-5/8"	13-3/4" x 5-5/8"	9-1/8" x 5-5/8"	
2830	28" x 15-1/2"	28" x 7-5/8"	13-3/4" x 7-5/8"	9-1/8" x 7-5/8"	
2834	28" x 17-1/2"	28" x 8-5/8"	13-3/4" x 8-5/8"	9-1/8" x 8-5/8"	
2840	28" x 21-1/2"	28" x 10-5/8"	13-3/4" x 10-5/8"	9-1/8" x 10-5/8"	
2848	28" x 25-1/2"	28" x 12-5/8"	13-3/4" x 12-5/8"	9-1/8" x 12-5/8"	
2850	28" x 27-1/2"	28" x 13-5/8"	13-3/4" x 13-5/8"	9-1/8" x 13-5/8"	
2854	28" x 29-1/2"	28" x 14-5/8"	13-3/4" x 14-5/8"	9-1/8" x 14-5/8"	
3024	32" x 11-1/2"	32" x 5-5/8"	15-3/4" x 5-5/8"	10-7/16" x 5-5/8"	
3030	32" x 15-1/2"	32" x 7-5/8"	15-3/4" x 7-5/8"	10-7/16" x 7-5/8"	
3034	32" x 17-1/2"	32" x 8-5/8"	15-3/4" x 8-5/8"	10-7/16" x 8-5/8"	
3040	32" x 21-1/2"	32" x 10-5/8"	15-3/4" x 10-5/8"	10-7/16" x 10-5/8"	
3048	32" x 25-1/2"	32" x 12-5/8"	15-3/4" x 12-5/8"	10-7/16" x 12-5/8"	
3050	32" x 27-1/2"	32" x 13-5/8"	15-3/4" x 13-5/8"	10-7/16" x 13-5/8"	
3054	32" x 29-1/2"	32" x 14-5/8"	15-3/4" x 14-5/8"	10-7/16" x 14-5/8"	
3424	36" x 11-1/2"	36" x 5-5/8"	17-3/4" x 5-5/8"	11-3/4" x 5-5/8"	8-21/32" x 5-5/8"
3430	36" x 15-1/2"	36" x 7-5/8"	17-3/4" x 7-5/8"	11-3/4" x 7-5/8"	8-21/32" x 7-5/8"
3434	36" x 17-1/2"	36" x 8-5/8"	17-3/4" x 8-5/8"	11-3/4" x 8-5/8"	8-21/32" x 8-5/8"
3440	36" x 21-1/2"	36" x 10-5/8"	17-3/4" x 10-5/8"	11-3/4" x 10-5/8"	8-21/32" x 10-5/8"
3448	36" x 25-1/2"	36" x 12-5/8"	17-3/4" x 12-5/8"	11-3/4" x 12-5/8"	8-21/32" x 12-5/8"
3450	36" x 27-1/2"	36" x 13-5/8"	17-3/4" x 13-5/8"	11-3/4" x 13-5/8"	8-21/32" x 13-5/8"
3454	36" x 29-1/2"	36" x 14-5/8"	17-3/4" x 14-5/8"	11-3/4" x 14-5/8"	8-21/32" x 14-5/8"
3824	40" x 11-1/2"	40" x 5-5/8"	19-3/4" x 5-5/8"	13-1/8" x 5-5/8"	9-21/32" x 5-5/8"
3830	40" x 15-1/2"	40" x 7-5/8"	19-3/4" x 7-5/8"	13-1/8" x 7-5/8"	9-21/32" x 7-5/8"
3834	40" x 17-1/2"	40" x 8-5/8"	19-3/4" x 8-5/8"	13-1/8" x 8-5/8"	9-21/32" x 8-5/8"
3840	40" x 21-1/2"	40" x 10-5/8"	19-3/4" x 10-5/8"	13-1/8" x 10-5/8"	9-21/32" x 10-5/8"
3848	40" x 25-1/2"	40" x 12-5/8"	19-3/4" x 12-5/8"	13-1/8" x 12-5/8"	9-21/32" x 12-5/8"
3850	40" x 27-1/2"	40" x 13-5/8"	19-3/4" x 13-5/8"	13-1/8" x 13-5/8"	9-21/32" x 13-5/8"
3854	40" x 29-1/2"	40" x 14-5/8"	19-3/4" x 14-5/8"	13-1/8" x 14-5/8"	9-21/32" x 14-5/8"
4024	44" x 11-1/2"	44" x 5-5/8"	21-3/4" x 5-5/8"	14-7/16" x 5-5/8"	10-21/32" x 5-5/8"
4030	44" x 15-1/2"	44" x 7-5/8"	21-3/4" x 7-5/8"	14-7/16" x 7-5/8"	10-21/32" x 7-5/8"
4034	44" x 17-1/2"	44" x 8-5/8"	21-3/4" x 8-5/8"	14-7/16" x 8-5/8"	10-21/32" x 8-5/8"
4040	44" x 21-1/2"	44" x 10-5/8"	21-3/4" x 10-5/8"	14-7/16" x 10-5/8"	10-21/32" x 10-5/8"
4048	44" x 25-1/2"	44" x 12-5/8"	21-3/4" x 12-5/8"	14-7/16" x 12-5/8"	10-21/32" x 12-5/8"
4050	44" x 27-1/2"	44" x 13-5/8"	21-3/4" x 13-5/8"	14-7/16" x 13-5/8"	10-21/32" x 13-5/8"
4054	44" x 29-1/2"	44" x 14-5/8"	21-3/4" x 14-5/8"	14-7/16" x 14-5/8"	10-21/32" x 14-5/8"

Tolerance 1/16" + .0

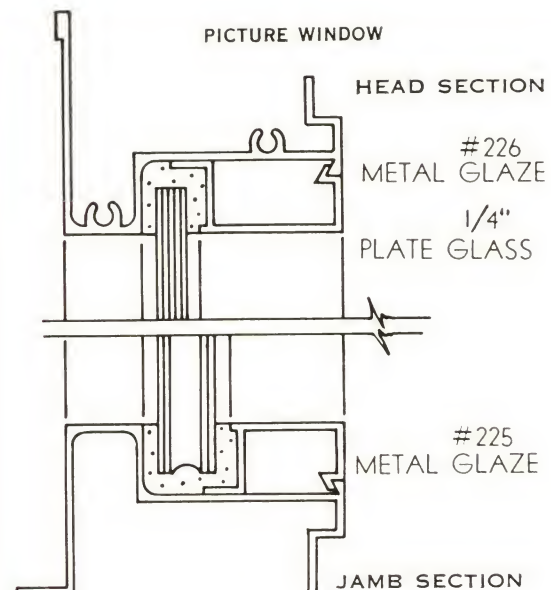
Installation details next page



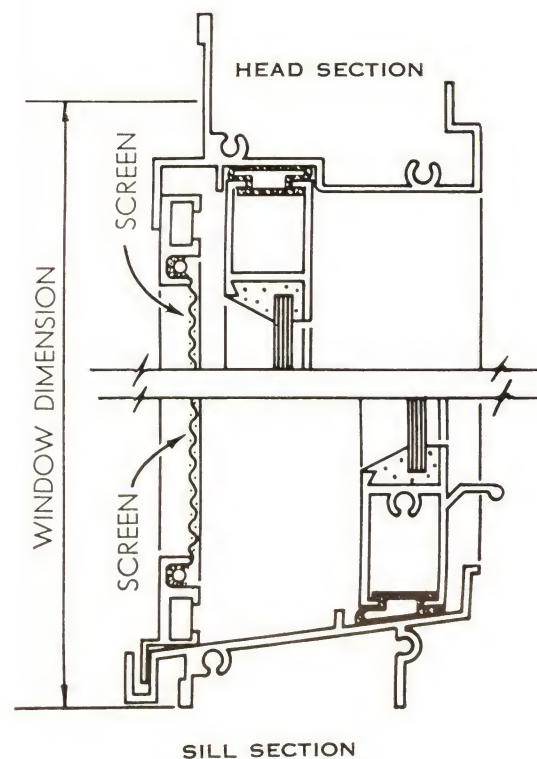
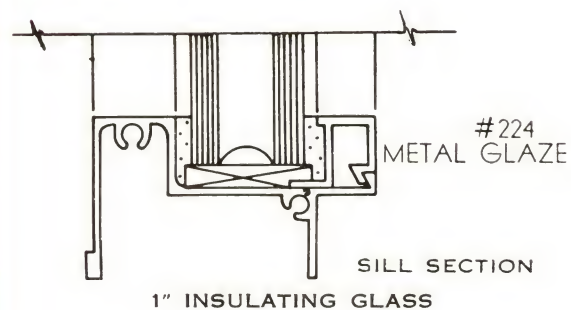
**ASSEMBLY DETAILS**



**PICTURE WINDOW**



1/2" INSULATING GLASS





To meet the growing popularity of awning windows in today's residential, commercial and institutional construction, Ualco has engineered and manufactured the Ualco Aluminum Awning Window to meet all desired features—both functional and appearance.

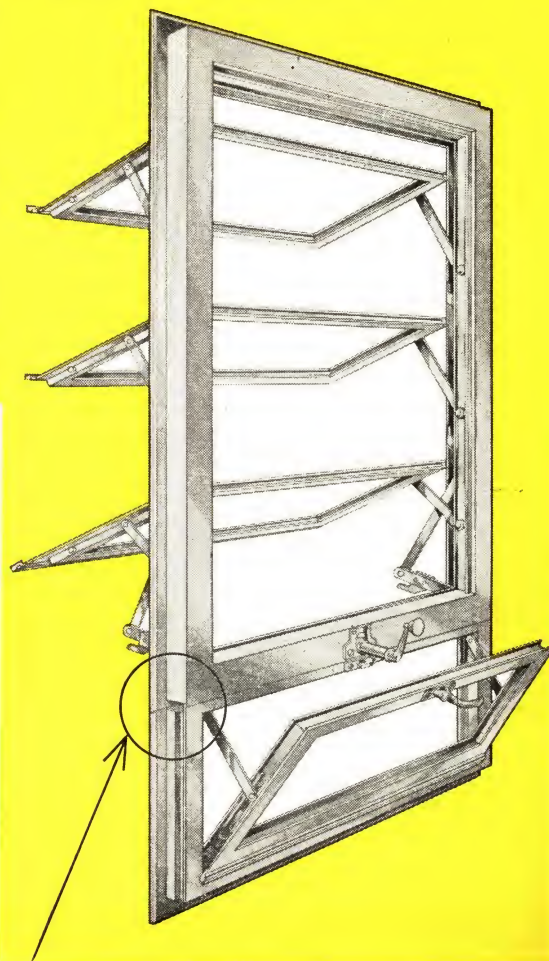
Ventilators are operated from center operator through torsion rod. Bottom ventilator opens for partial

ventilation, while upper ventilators remain closed. (Night ventilation) Ventilators lock in any position.

Sections are narrow to afford maximum ventilation and light—and to make possible the combining of wide banks for effective window walls.

Made of special extruded aluminum, they last as long as the structure itself.

## AWNING WITH HOPPER



**THE AWNING HOPPER WINDOW IS SELF-MULLING**

## CHECK THESE FEATURES:

### 1. HEAVY, RIGID FRAME

MADE OF EXTRUDED LIFETIME ALUMINUM.

### 2. INTEGRAL FIN

COMPLETELY SURROUNDS WINDOWS. TAKES BRICK FIN AND FIN TRIM.

### 3. JIFFY QUICK SILL CLIPS

SLIDE IN CHANNEL FROM EACH SIDE. LOCATE AS MANY AS WANTED WHERE WANTED.

### 4. GIVES MAXIMUM VENTILATION

VENTS OPEN TO 90 DEGREES.

### 5. CLOSE WEATHER-TIGHT

COMPLETELY WEATHER-STRIPPED WITH KOROSEAL.

### 6. EASY TO OPERATE

CENTER OPERATION HAS FINGER-TOUCH CONTROL. TORSION BAR OILITE BEARINGS.

### 7. NIGHT VENTILATION

BOTTOM VENTILATOR OPENS FOR NIGHT VENTILATION WHILE UPPER VENTILATORS REMAIN LOCKED AND CLOSED.

### 8. AUTOMATICALLY-LOCKING VENTILATORS

EVERY VENTILATOR AUTOMATICALLY LOCKS—NO EXTERNAL LOCKING ATTACHMENTS.

### 9. EASY TO CLEAN

TOP VENTILATOR LOWERS ABOUT 4 INCHES TO PERMIT EASY CLEANING FROM THE INSIDE.

### 10. FLUSH SCREENS

RIGID FRAME; FITS FLUSH WITH WINDOW.

## SPECIFICATIONS:

### 1. MATERIALS:

All window sections are extruded 6063-T5 aluminum. All frame sections shall have a minimum depth of two inches. Ventilator head and sill sections shall have a minimum depth of 1 1/4 inches and all ventilator jamb sections shall have a minimum depth of 1 inch. Operating hardware shall be die cast aluminum.

### 2. CONSTRUCTION:

Frame sections shall be mortised and tenoned, then swaged at all corners. Note: There shall be three mortise and tenon fastenings to each corner of the frame sections.

When ventilators are in the closed position, there shall be three weathering contacts around the complete perimeter of the ventilators, one that is weatherstripped.

Torsion bar is supported by four pillow blocks inserted in the sill section. These pillow blocks have inserted in them oilite bearings for the torsion bar to rotate in. The linkage in each jamb section operates on micarda or nylon rollers for easy operation.

The UALCO awning window is designed to insure positive venetian blind or shade coverage around the complete perimeter of the window.

The sill section has incorporated a channel on the under side for installation of sill clip anchors.

The sill clips can slide in from each side and be located anywhere needed (or as many as needed.)

The important feature of the Ualco awning window is the complete automatic locking of each and every ventilator (including the lower ventilator.)

There shall be no external locking attachments. All locking of the ventilators at each jamb section shall be integral.

### 3. OPERATION:

All opening ventilators shall open more than 85 degrees.

The top ventilator shall lower about 5 inches to permit easy cleaning from the inside.

All ventilators (including the lower ventilator) shall be automatically locked on each side, eliminating stresses on pivot points.

Ventilator operating power shall be transmitted from the center located operator through a torsion rod that extends to each jamb section of the window and fastens onto the operating linkage.

The bottom ventilator shall open for partial ventilation, while the upper ventilators remain closed (night ventilation.)

The lower ventilator opens first—for night or inclement weather ventilation.

### 4. HARDWARE

Operator shall be center located and not to extend over 3/4 inch above face of window.

The UALCO operator is a worm gear operator

enclosed in a die cast aluminum housing. The gear segment is 2014-T4 aluminum alloy. Worm gear and shaft are of stainless steel. The operator crank is located extremely low and projects out over the sill. There is no interference to venetian blinds.

### 5. WEATHERING:

All ventilators shall be completely weatherstripped at all outside contacts with Koroseal or Vinyl.

When ventilators are closed, weatherstripping will be compressed by a load equal to 15 pounds minimum. When ventilators are open, weatherstripping will return to normal shape.

### 6. SCREENS:

Screens shall be rolled or extruded aluminum.

The corners shall be mitered and corner angle reinforced and dimpled.

Screens shall be inserted in recess of window frame and secured by swivel clips. The UALCO awning window screen fits flush with the inside face of the window.

### 7. MULLIONS:

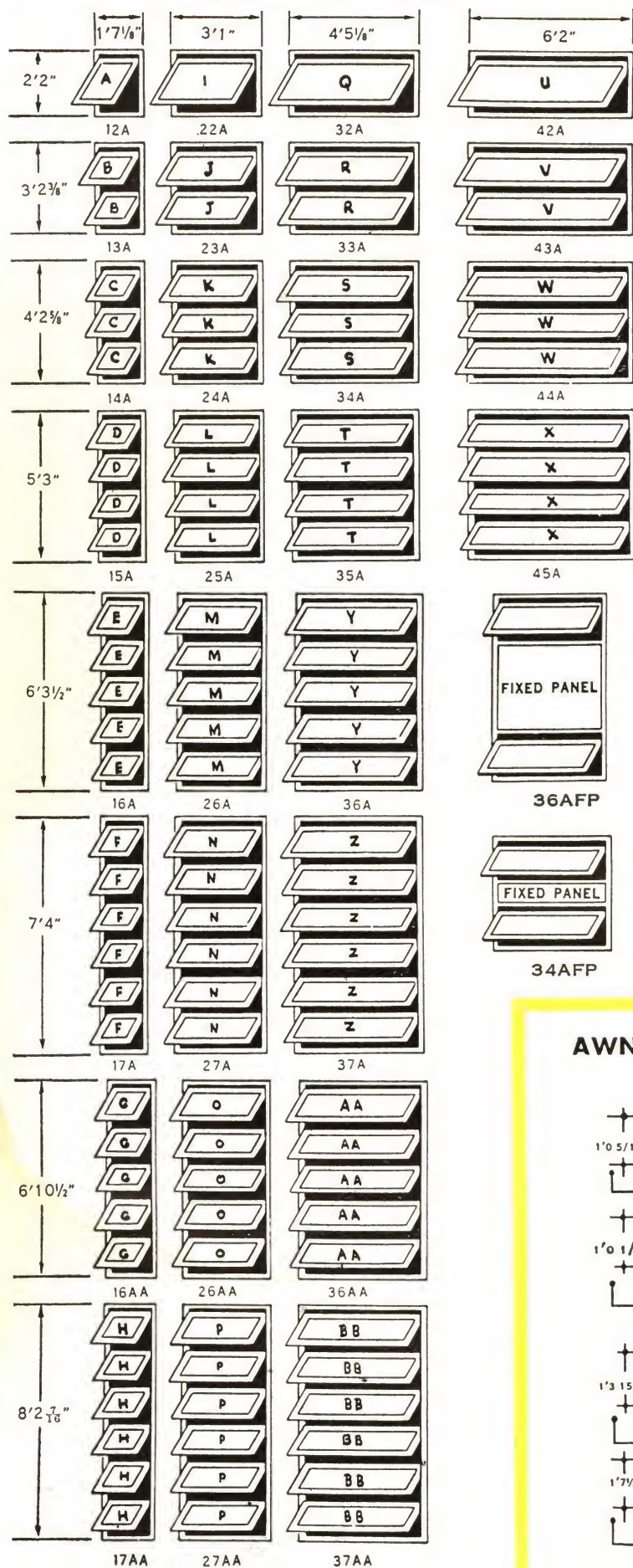
Mullions shall be furnished by UALCO and as shown on drawings. (90 degree, 135 degree and 180 degree.)

### 8. GLAZING:

Single lights outside bed and face compound—standard. Metal glazing also available.



## STANDARD SIZES



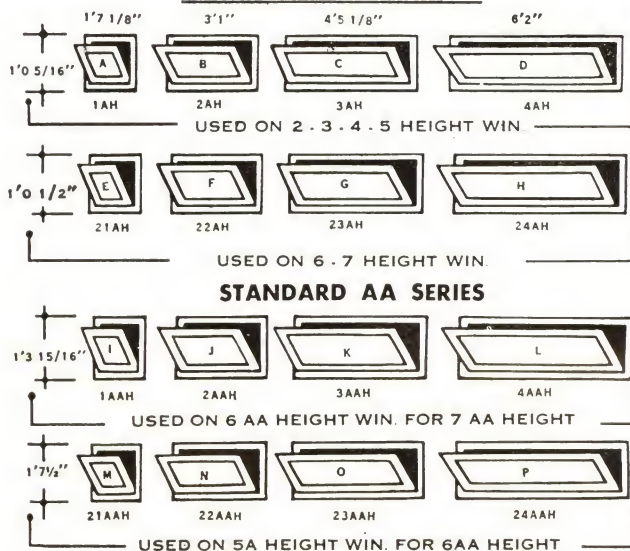
## AWNING WINDOW GLASS SIZES

STANDARD		AM MODULAR		AMM MODULAR	
WIDTH	HEIGHT	WIDTH	HEIGHT	WIDTH	HEIGHT
A	15- $\frac{1}{8}$ "x19- $\frac{3}{4}$ "	1	20" x17- $\frac{3}{4}$ "	21	17" x10- $\frac{3}{4}$ "
B	15- $\frac{1}{8}$ "x15- $\frac{5}{8}$ "	2	20" x16- $\frac{3}{8}$ "	22	17" x12- $\frac{15}{16}$ "
C	15- $\frac{1}{8}$ "x14- $\frac{1}{4}$ "	3	20" x13- $\frac{3}{8}$ "	23	17" x13- $\frac{11}{16}$ "
D	15- $\frac{1}{8}$ "x13- $\frac{5}{8}$ "	4	20" x13- $\frac{7}{8}$ "	24	17" x14- $\frac{1}{8}$ "
E	15- $\frac{1}{8}$ "x13- $\frac{1}{8}$ "	5	20" x14- $\frac{5}{8}$ "	25	17" x14- $\frac{3}{8}$ "
F	15- $\frac{1}{8}$ "x13"	6	20" x14- $\frac{3}{4}$ "	26	17" x14- $\frac{1}{2}$ "
G	15- $\frac{1}{8}$ "x14- $\frac{5}{8}$ "				
H	15- $\frac{1}{8}$ "x14- $\frac{3}{4}$ "				
I	33" x19- $\frac{3}{4}$ "	7	36" x17- $\frac{3}{4}$ "	27	37" x10- $\frac{3}{4}$ "
J	33" x15- $\frac{5}{8}$ "	8	36" x16- $\frac{3}{8}$ "	28	37" x12- $\frac{15}{16}$ "
K	33" x14- $\frac{1}{4}$ "	9	36" x13- $\frac{3}{8}$ "	29	37" x13- $\frac{11}{16}$ "
L	33" x13- $\frac{5}{8}$ "	10	36" x13- $\frac{7}{8}$ "	30	37" x14- $\frac{1}{8}$ "
M	33" x13- $\frac{1}{8}$ "	11	36" x14- $\frac{5}{8}$ "	31	37" x14- $\frac{3}{8}$ "
N	33" x13"	12	36" x14- $\frac{3}{4}$ "	32	37" x14- $\frac{1}{2}$ "
O	33" x14- $\frac{5}{8}$ "				
P	33" x14- $\frac{3}{4}$ "				
Q	49- $\frac{1}{8}$ "x19- $\frac{3}{4}$ "	13	44" x17- $\frac{3}{4}$ "	33	45" x10- $\frac{3}{4}$ "
R	49- $\frac{1}{8}$ "x15- $\frac{5}{8}$ "	14	44" x16- $\frac{3}{8}$ "	34	45" x12- $\frac{15}{16}$ "
S	49- $\frac{1}{8}$ "x14- $\frac{1}{4}$ "	15	44" x13- $\frac{3}{8}$ "	35	45" x13- $\frac{11}{16}$ "
T	49- $\frac{1}{8}$ "x13- $\frac{5}{8}$ "	16	44" x13- $\frac{7}{8}$ "	36	45" x14- $\frac{1}{8}$ "
U	70" x19- $\frac{3}{4}$ "	17	60" x17- $\frac{3}{4}$ "	37	57" x10- $\frac{3}{4}$ "
V	70" x15- $\frac{5}{8}$ "	18	60" x16- $\frac{3}{8}$ "	38	57" x12- $\frac{15}{16}$ "
W	70" x14- $\frac{1}{4}$ "	19	60" x13- $\frac{3}{8}$ "	39	57" x13- $\frac{11}{16}$ "
X	70" x13- $\frac{5}{8}$ "	20	60" x13- $\frac{7}{8}$ "	40	57" x14- $\frac{1}{8}$ "
Y	49- $\frac{1}{8}$ "x13- $\frac{1}{8}$ "	41	44" x14- $\frac{5}{8}$ "	43	45" x14- $\frac{3}{8}$ "
Z	49- $\frac{1}{8}$ "x13"	42	44" x14- $\frac{3}{4}$ "	44	45" x14- $\frac{1}{2}$ "
AA	49- $\frac{1}{8}$ "x14- $\frac{5}{8}$ "				
BB	49- $\frac{1}{8}$ "x14- $\frac{3}{4}$ "				

**NOTE: ANY OPERATING VENT ON ANY WINDOW MAY BE FIXED STATIONARY, (EXCEPT BOTTOM VENT)**

## AWNING HOPPER WINDOW . . . SELF MULLING

### Standard A Series





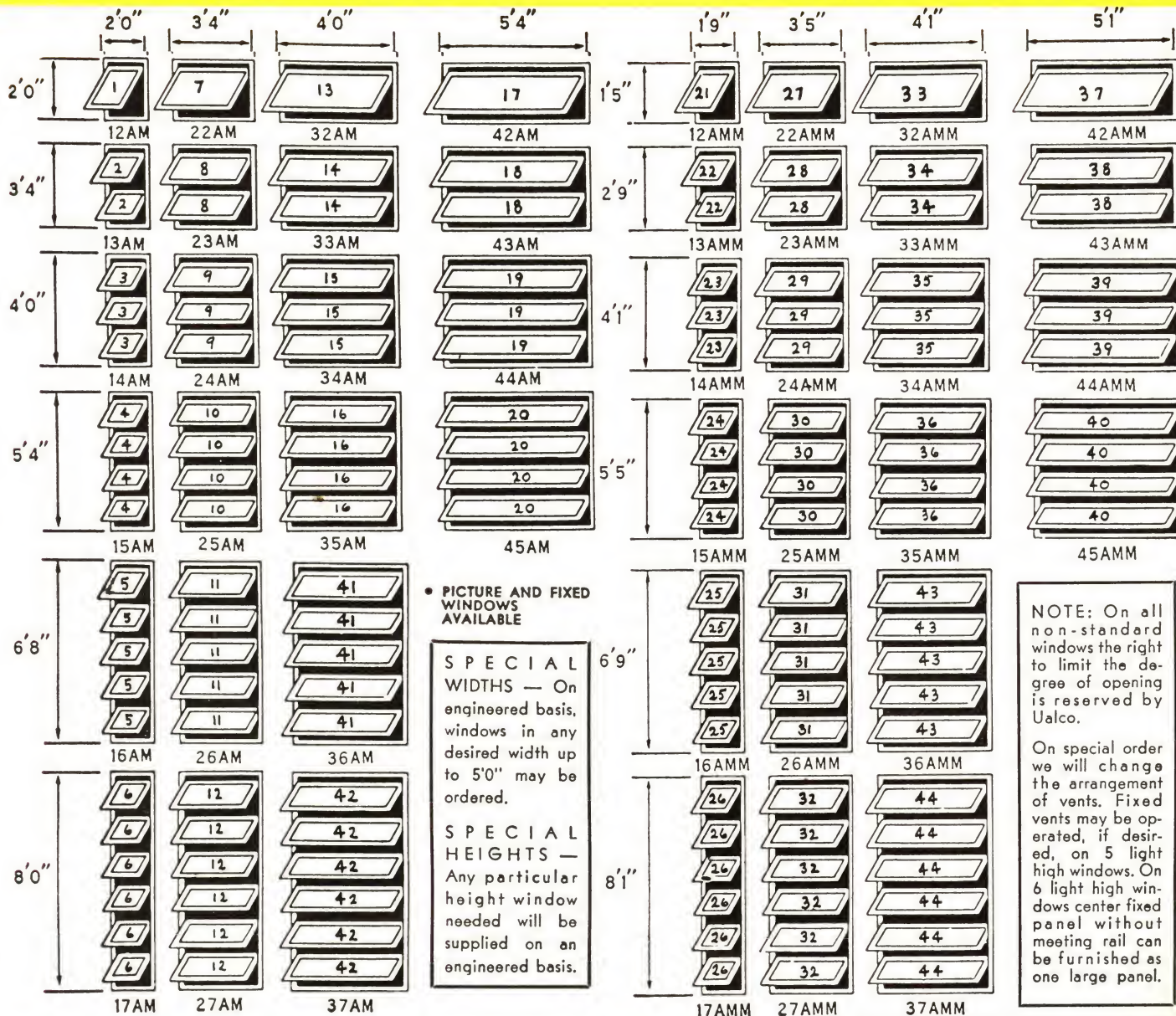


# ALUMINUM AWNING WINDOWS

5a  
Un

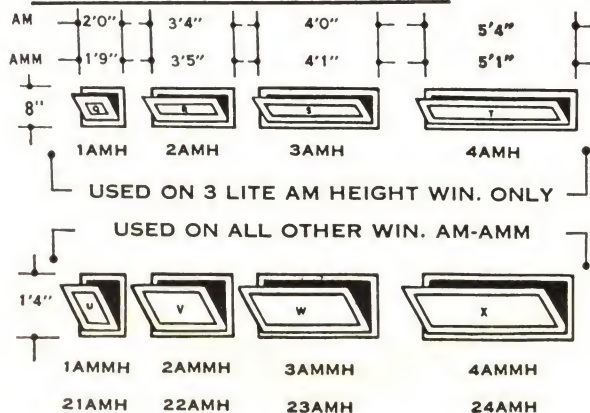
(MODULAR SIZES) (Series AM)

(MODULAR SIZES) (Series AMM)



## AWNING HOPPER WINDOW—SELF MULLING

### Modular AM & AMM Series



NOTE: MEASUREMENTS ARE HOPPER DIM. HEIGHT NOT OVER-ALL MEASUREMENTS.

### GLASS SIZES... STANDARD A & AA

A	17- $\frac{1}{4}$ "x10- $\frac{3}{8}$ "	I	17- $\frac{1}{4}$ "x14- $\frac{3}{8}$ "
B	35- $\frac{1}{8}$ "x10- $\frac{3}{8}$ "	J	35- $\frac{1}{8}$ "x14- $\frac{3}{8}$ "
C	51- $\frac{1}{4}$ "x10- $\frac{3}{8}$ "	K	51- $\frac{1}{4}$ "x14- $\frac{3}{8}$ "
D	72- $\frac{1}{8}$ "x10- $\frac{3}{8}$ "	L	72- $\frac{1}{8}$ "x14- $\frac{3}{8}$ "
E	17- $\frac{1}{4}$ "x10- $\frac{3}{4}$ "	M	17- $\frac{1}{4}$ "x17- $\frac{3}{4}$ "
F	35- $\frac{1}{8}$ "x10- $\frac{3}{4}$ "	N	35- $\frac{1}{8}$ "x17- $\frac{3}{4}$ "
G	51- $\frac{1}{4}$ "x10- $\frac{3}{4}$ "	O	51- $\frac{1}{4}$ "x17- $\frac{3}{4}$ "
H	72- $\frac{1}{8}$ "x10- $\frac{3}{4}$ "	P	72- $\frac{1}{8}$ "x17- $\frac{3}{4}$ "

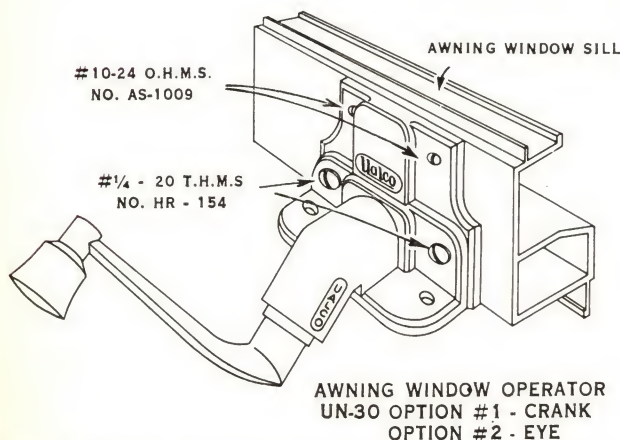
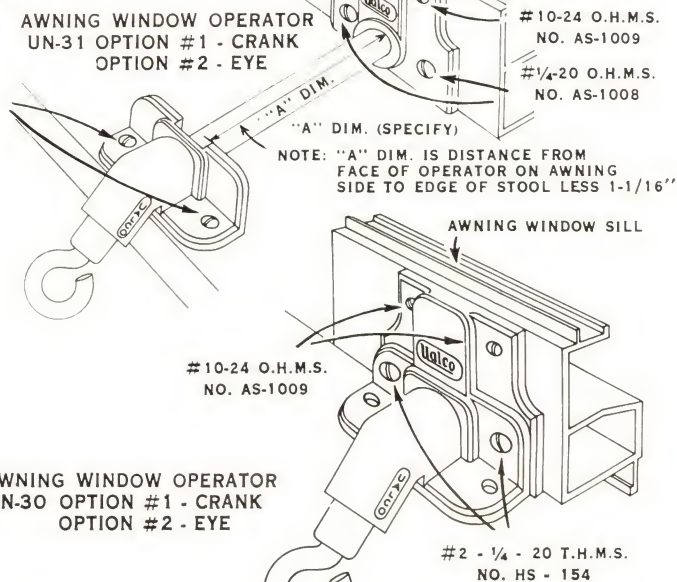
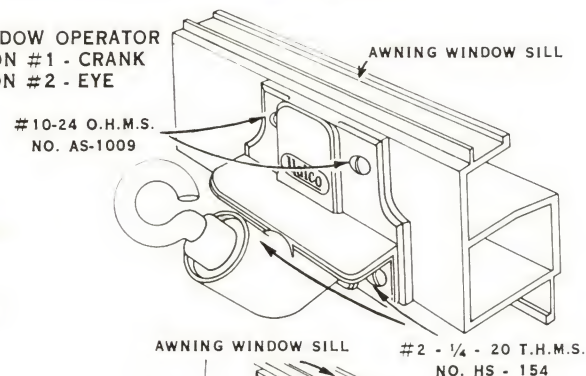
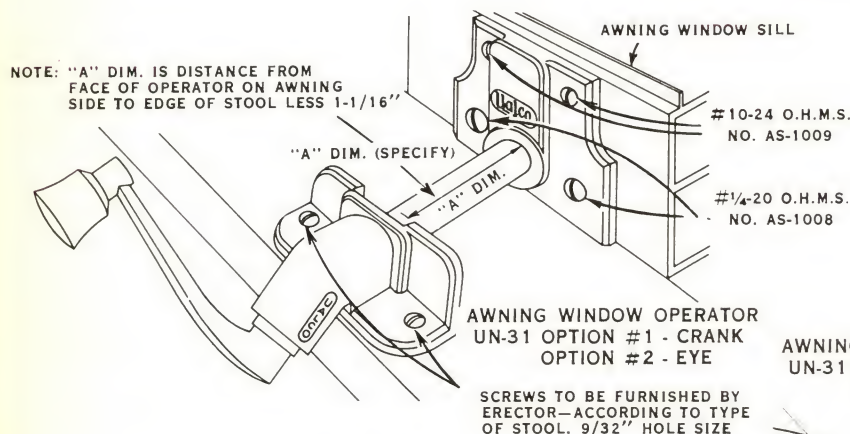
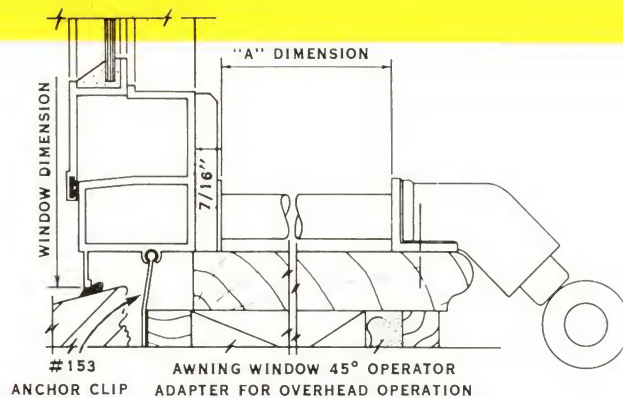
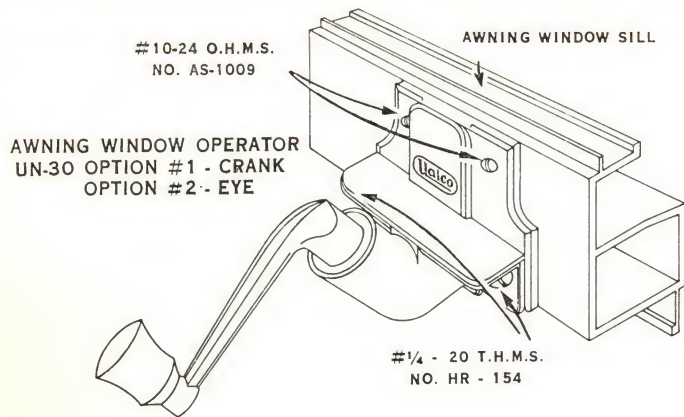
### AM SERIES

Q	22- $\frac{1}{8}$ "x 6- $\frac{1}{4}$ "	U	22- $\frac{1}{8}$ "x14- $\frac{1}{4}$ "
R	38- $\frac{1}{8}$ "x 6- $\frac{1}{4}$ "	V	38- $\frac{1}{8}$ "x14- $\frac{1}{4}$ "
S	46- $\frac{1}{8}$ "x 6- $\frac{1}{4}$ "	W	46- $\frac{1}{8}$ "x14- $\frac{1}{4}$ "
T	62- $\frac{1}{8}$ "x 6- $\frac{1}{4}$ "	X	62- $\frac{1}{8}$ "x14- $\frac{1}{4}$ "

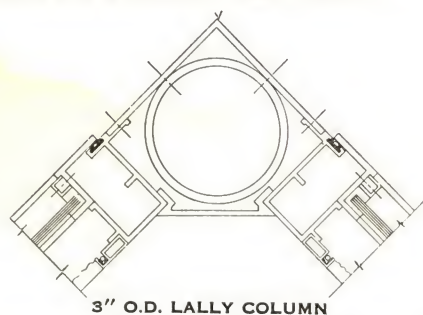
### AMM SERIES

Q	19- $\frac{1}{8}$ "x 6- $\frac{1}{4}$ "	U <sub>1</sub>	19- $\frac{1}{8}$ "x14- $\frac{1}{4}$ "
R <sub>1</sub>	39- $\frac{1}{8}$ "x 6- $\frac{1}{4}$ "	V <sub>1</sub>	39- $\frac{1}{8}$ "x14- $\frac{1}{4}$ "
S <sub>1</sub>	47- $\frac{1}{8}$ "x 6- $\frac{1}{4}$ "	W <sub>1</sub>	47- $\frac{1}{8}$ "x14- $\frac{1}{4}$ "
T <sub>1</sub>	59- $\frac{1}{8}$ "x 6- $\frac{1}{4}$ "	X <sub>1</sub>	59- $\frac{1}{8}$ "x14- $\frac{1}{4}$ "





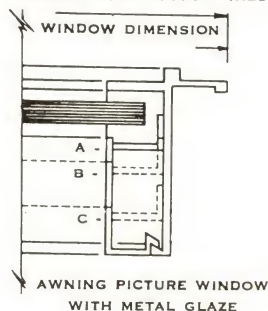
NOTE: POLE CRANKS AVAILABLE FOR OVERHEAD OPERATION UPON REQUEST. PLEASE STATE QUANTITY AND LENGTH.



Shown is Ualco engineered 90° degree corner mullion. Favored by many for added beauty to corner window installations, it eliminates the projecting edges that are made

by the use of the 90 degree mullion. Unless otherwise specified, mullion bolt holes are drilled in the field. (Mullions are furnished in 90, 135 and 180 degree angles.)

- A - #226 METAL GLAZE FOR 1/4" PLATE GLASS
- B - #225 METAL GLAZE FOR 1/2" INSULATING GLASS SHOWN WITH DOTTED LINES
- C - #224 1" METAL GLAZE FOR 1" INSULATING GLASS SHOWN WITH DOTTED LINES

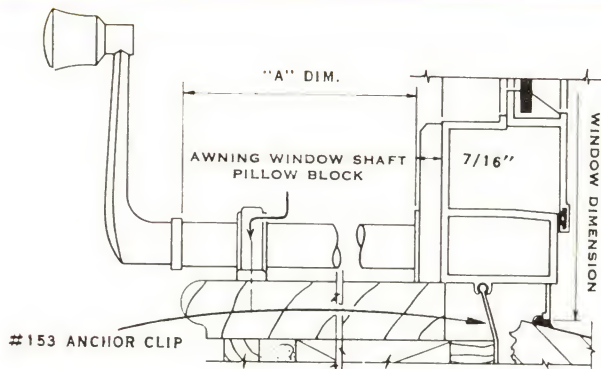


## UNIVERSAL GLAZING BEAD (VENTS)

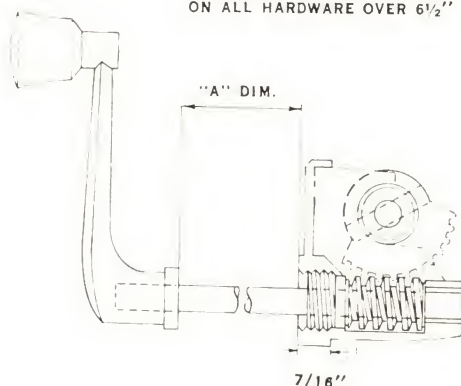
Cutaway shows application of metal glaze which is available for use on ventilators.



**INSTALLATION ACCESSORIES**



STANDARD AWNING OPERATOR  
PILLOW BLOCKS SHALL BE USED  
ON ALL HARDWARE OVER 6 1/2" 'A' DIM.

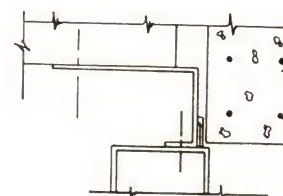
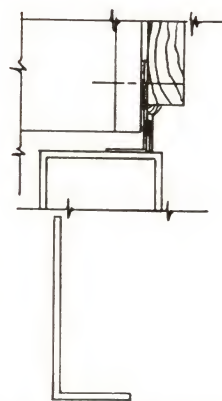


CONTINUOUS FIN

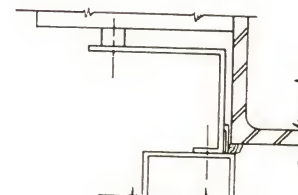
**UALCO EXCLUSIVE "STRIP-PROOF"  
OPERATOR**

Shown in detail above is the Ualco "strip-proof" operator with heavy-duty torision bar built-in cam lock. With no external locking gear, it completely eliminates all possibility of stripping gear teeth through failure to unlock window before opening. In one operation, the turning of the operator handle, it unlocks, opens, closes and locks all vents. Too, it automatically locks all vents in any position to over 90 degrees.

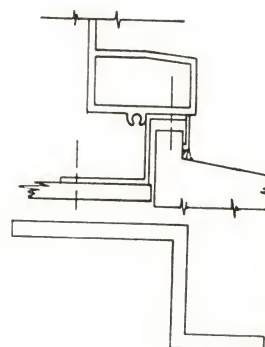
The center operating shaft is also available on either right or left side of window to meet varied desires. Can be furnished in special lengths to meet any needed extension.



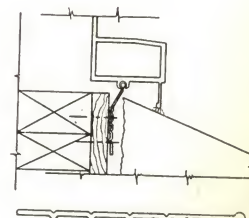
CLIP #176



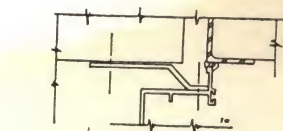
CLIP #175



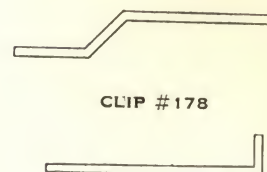
CLIP #177



CLIP #153



CLIP #178



MASONRY CLIP

**ASSEMBLY DETAILS**

SCREEN &  
STORM  
SASH CLIP

VINYL  
SEAL

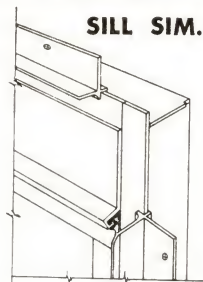
FLAT  
SCREEN  
CLIP

FLUSH-STORM SASH  
INSTALLATION ASSEMBLY  
DETAIL

FLUSH SCREEN  
ASSEMBLY DETAIL

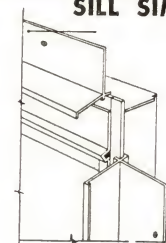
All storm sash are of extruded aluminum and fit flush. Even the clips are flat. Installed and removed from the inside by the turn of clips.

Of rolled or extruded aluminum, all screens are flush fitting. Installed or removed from the inside by the turn of the flat clips.



BRICK MOULDING TRIM  
ASSEMBLY DETAIL

For simple installation  
**SILL SIM.**

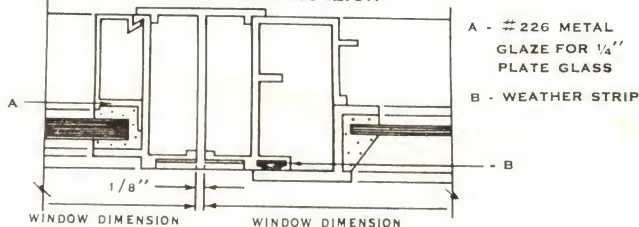


FIN TRIM ASSEMBLY DETAIL  
HEAD & JAMB SECTION

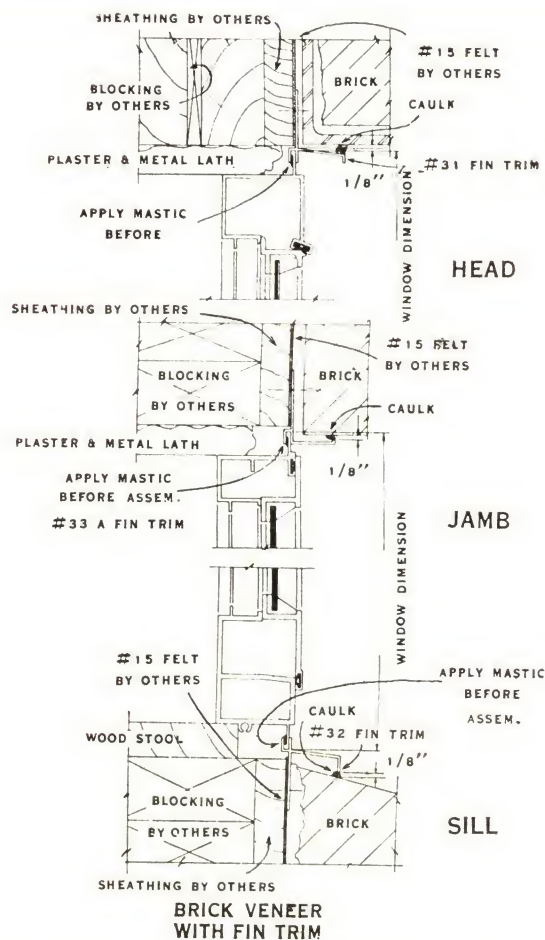
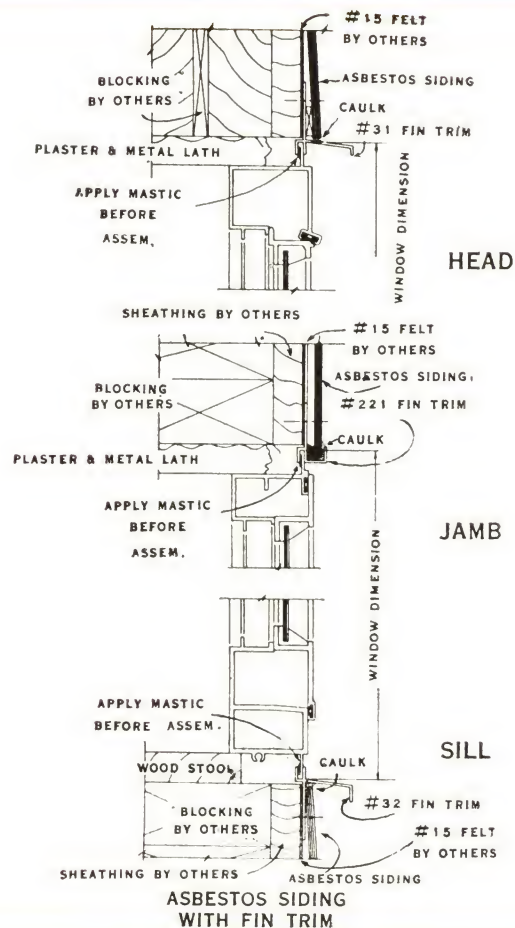
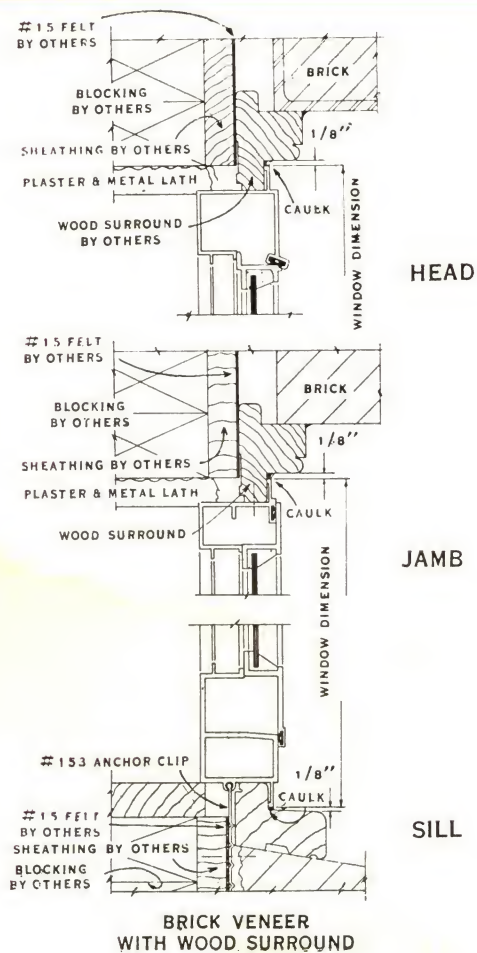
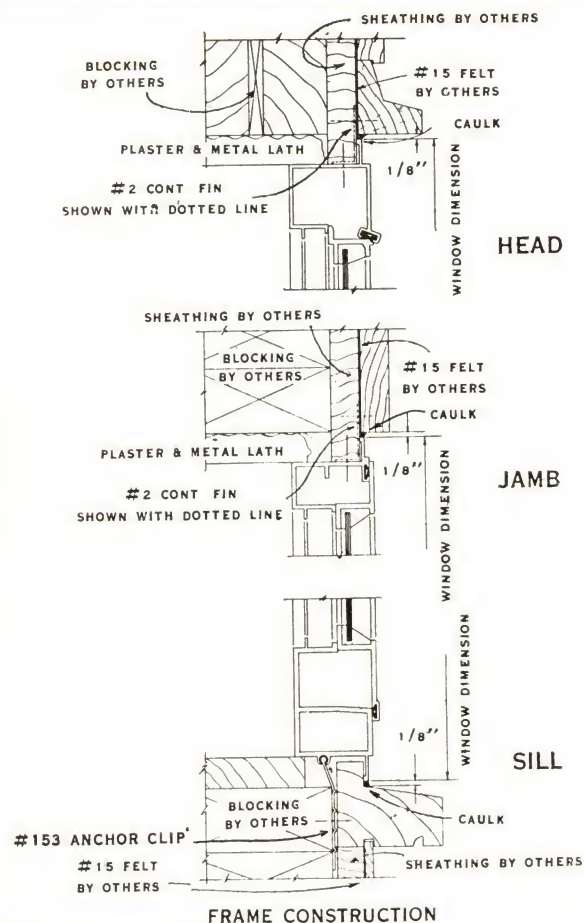
**NIGHT VENTILATION**

A turn of the operating handle opens the bottom vent first . . . for partial ventilation if desired. The other vents remain securely locked in a closed position while the bottom vent remains locked in its desired position by the action of the built-in cam lock.

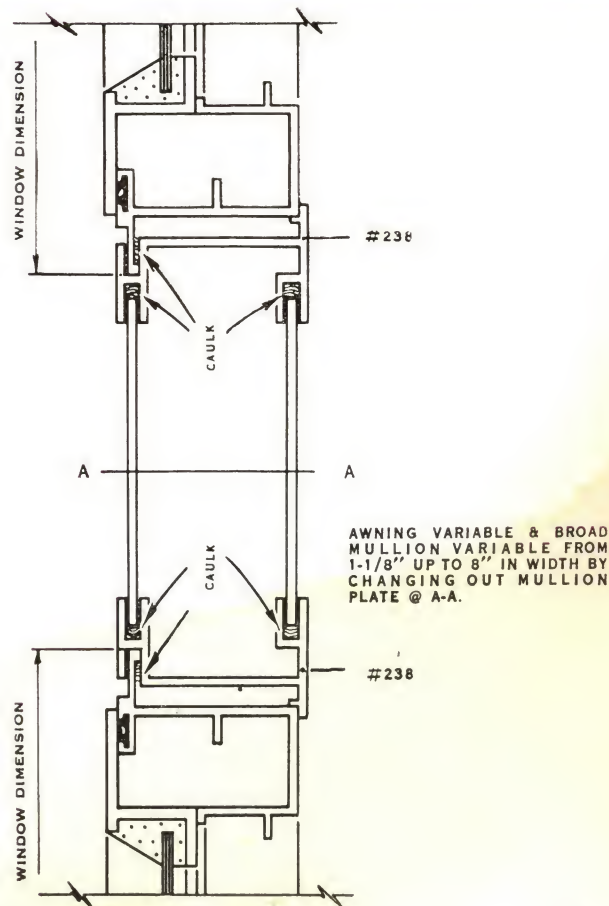
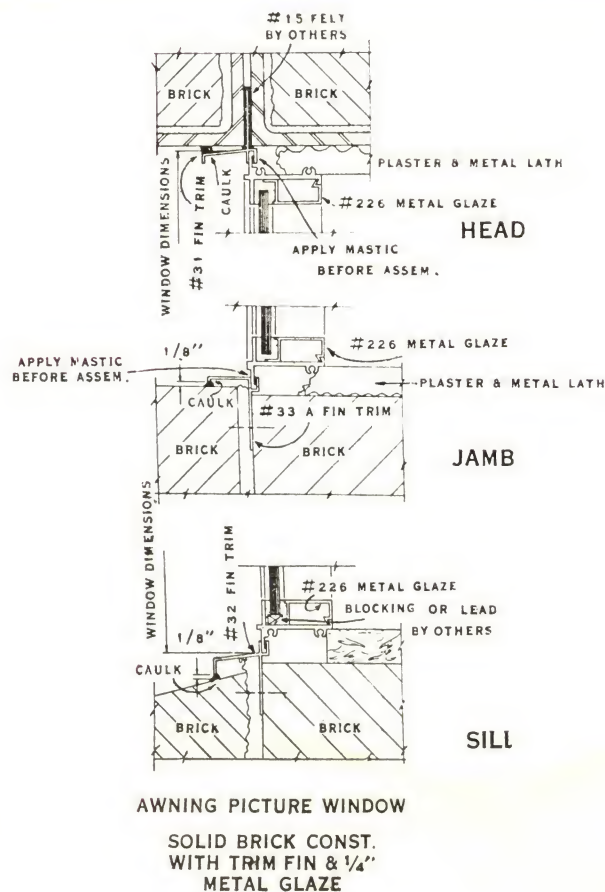
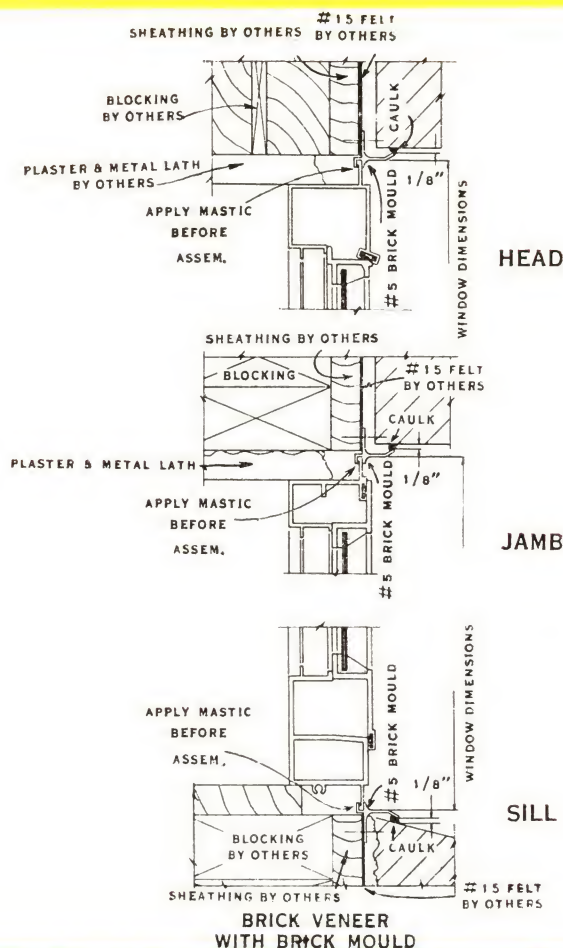
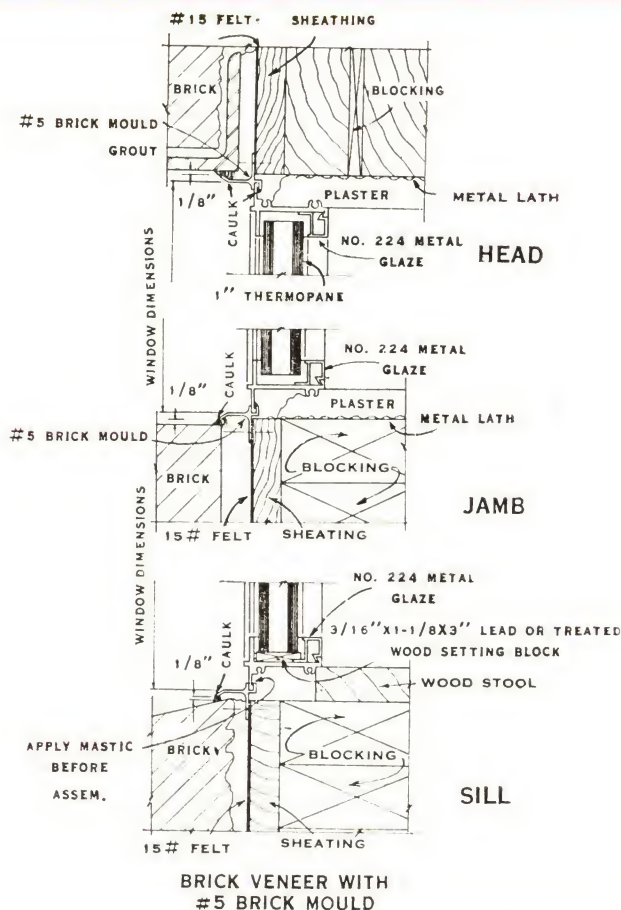
AWNING WINDOW MULLED TO AWNING PICTURE WINDOW WITH STAND-ARD 180° MULLION





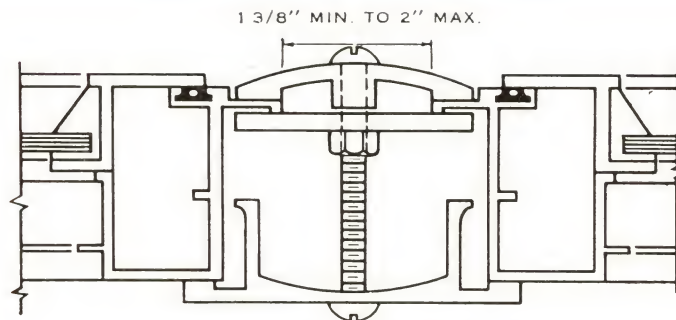




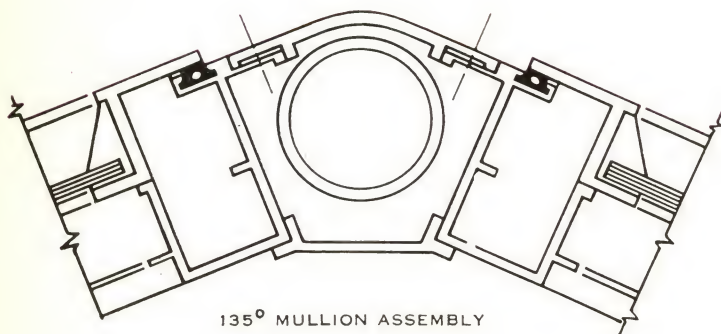




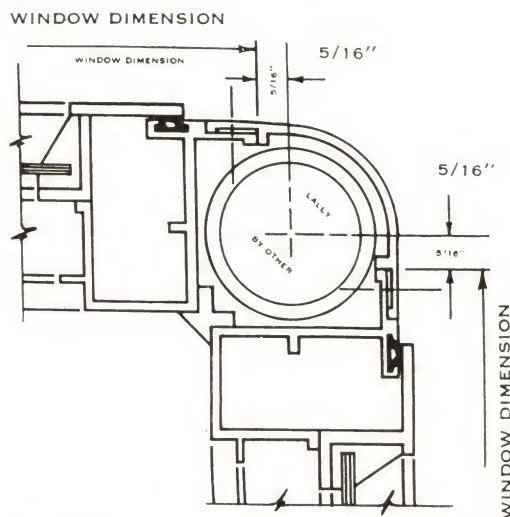
**AWNING WINDOW  
ASSEMBLY DETAILS**



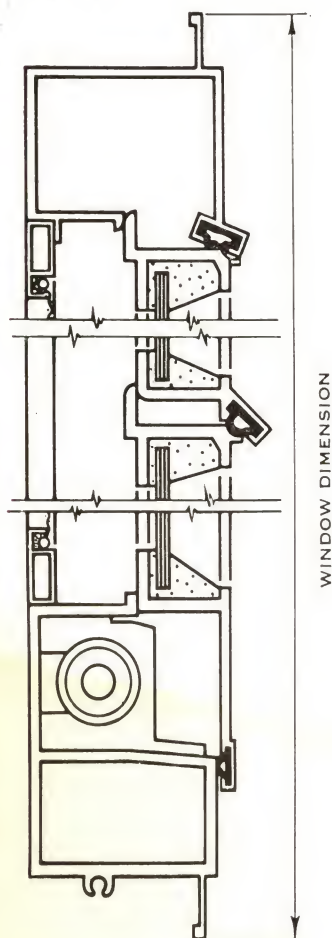
180° VARIABLE MULLION ASSEMBLY



135° MULLION ASSEMBLY

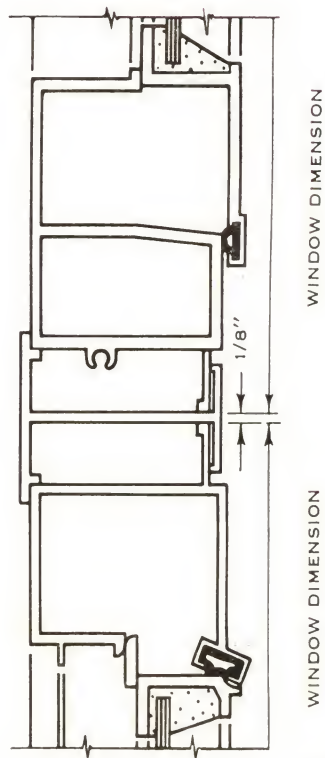


90° CORNER MULLION  
ASSEMBLY DETAIL



AWNING ASSEMBLY DETAIL

ASSEMBLY DETAILS



HORIZONTAL MULLION  
ASSEMBLY DETAIL

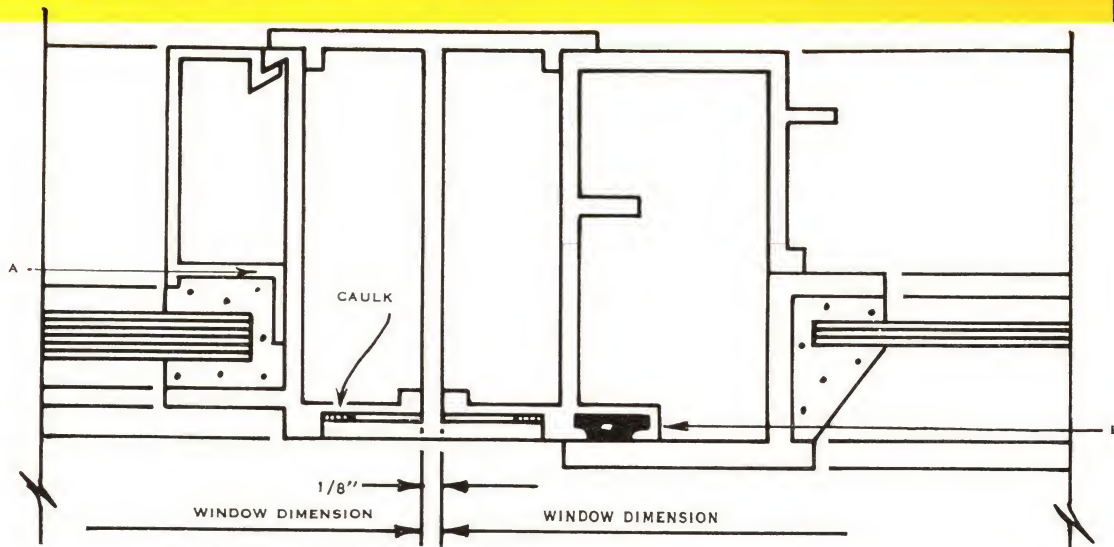
**SCALE 1/2 SIZE**





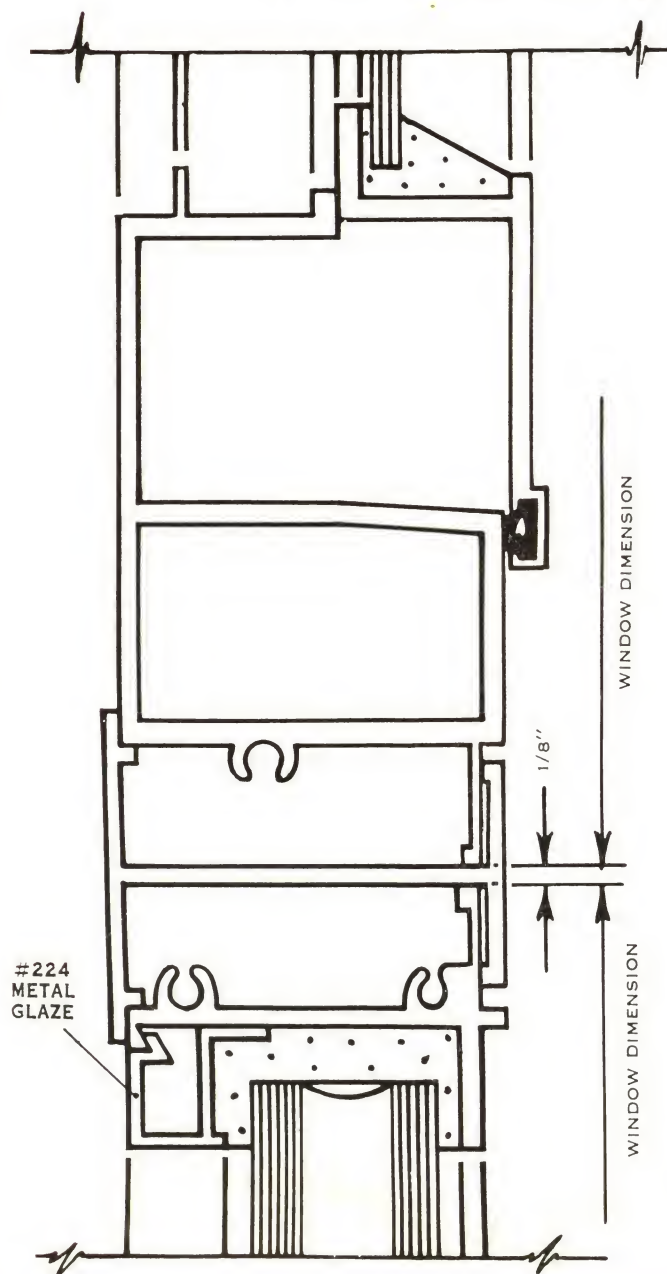
## ASSEMBLY DETAILS

SCALE  
FULL SIZE

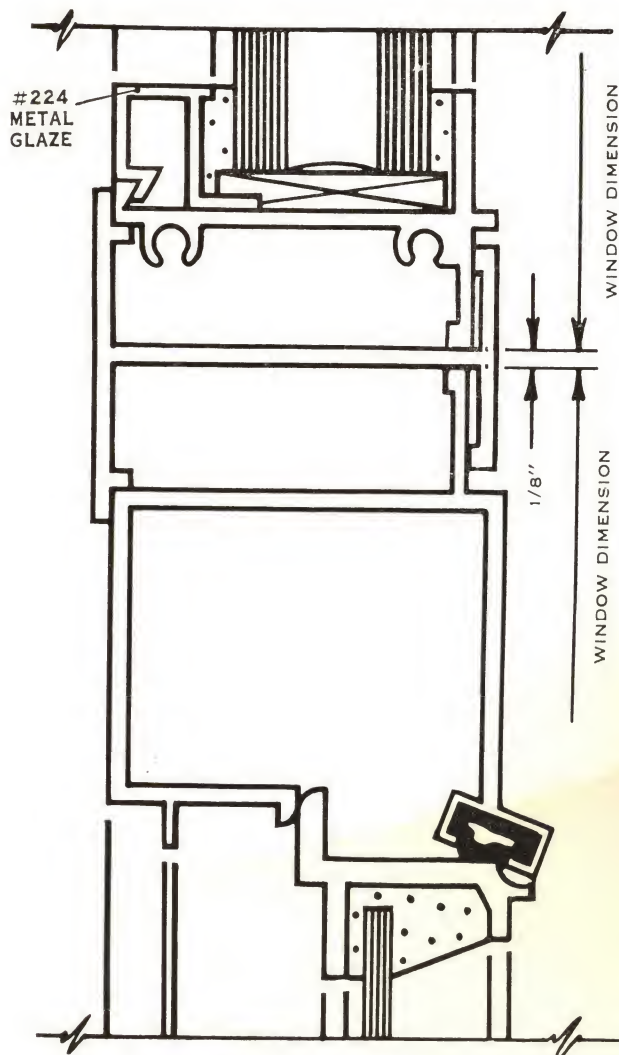


- A - #226 METAL GLAZE  
FOR 1/4" PLATE GLASS
- B - WEATHER STRIP

AWNING WINDOW MULLED TO AWNING  
PICTURE WINDOW WITH STAND-  
ARD 180° MULLION



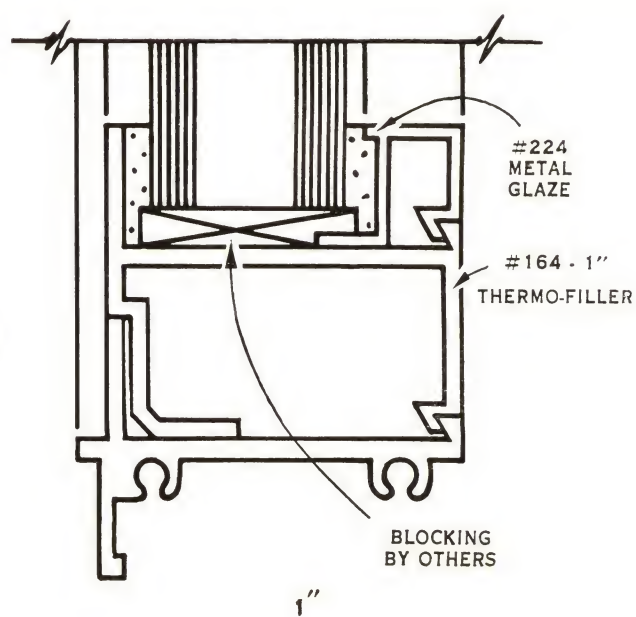
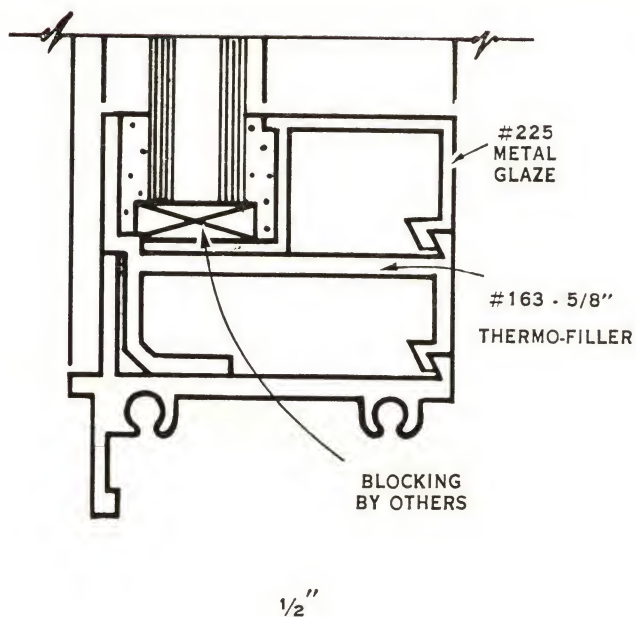
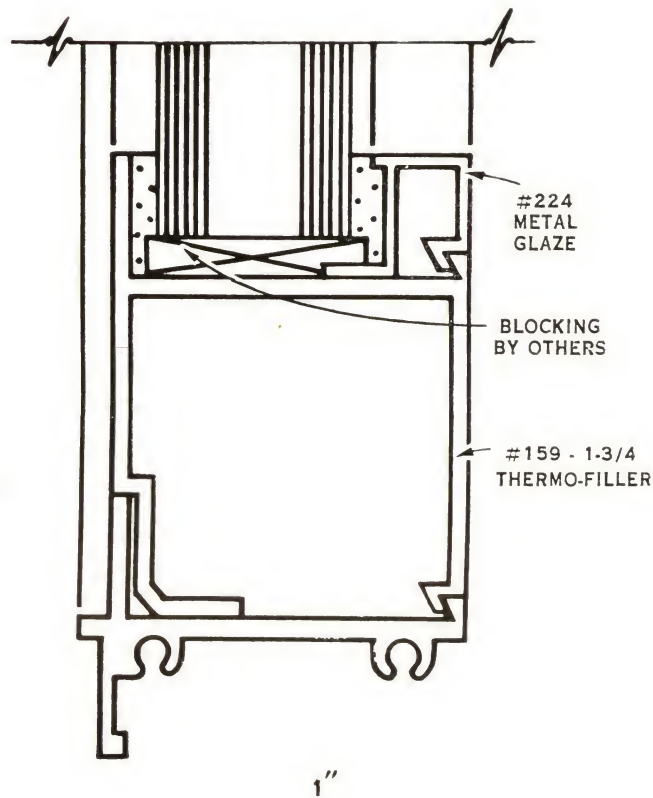
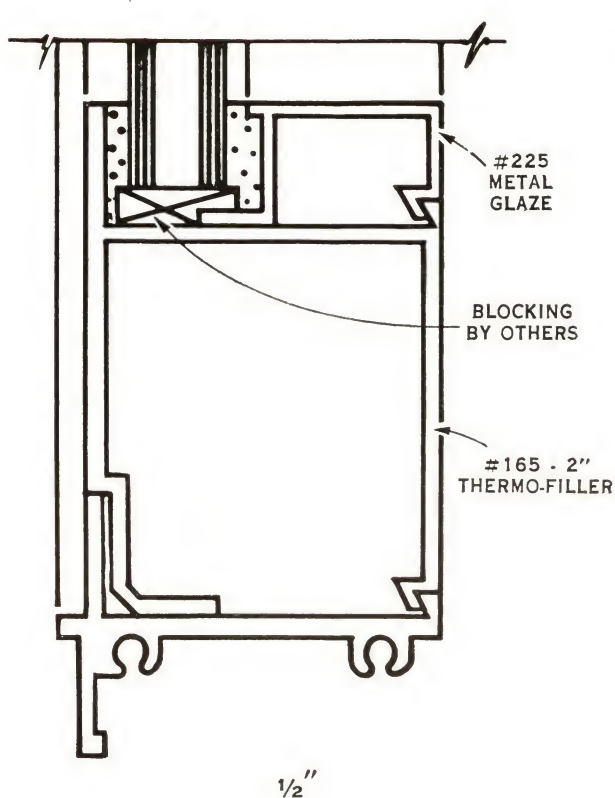
STANDARD "TEE"  
MULLION-HORIZONTAL  
PIC. UNDER AWNING WINDOW



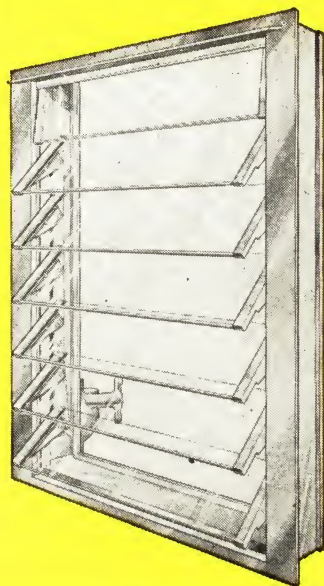
STANDARD "TEE"  
MULLION-HORIZONTAL  
PIC. OVER AWNING WINDOW



### AWNING WINDOW THERMO-FILLERS WITH METAL GLAZE







## JALOUSIE DOOR

### DOOR FRAME

- West Coast 1 3/4" fir, unpainted. (See sizes below).

### LOUVER FRAME

- Specially extruded aluminum. Lifetime, satin-finish. Cannot rust, rot, split or warp. Unaffected by salt water vapor.

### GLASS LOUVERS

- Glass included with door. Available in either clear or obscure sheet.

### OPERATION

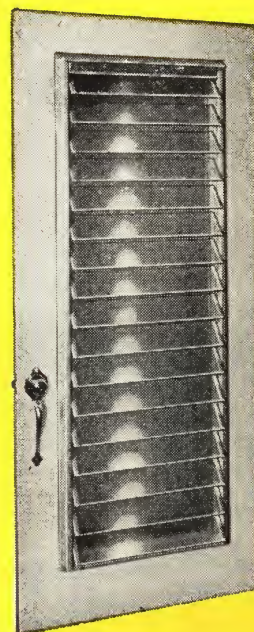
- Complete ventilation control at fingertips. Fool-proof mechanism.

### LOUVER LOCK

- Louvers lock automatically in all positions for protection and privacy.

## JALOUSIE DOOR SIZES:

2'6" x 6'8"      3'0" x 6'8"  
2'8" x 6'8"      2'8" x 7'0"  
3'0" x 7'0"



## GLASS LOUVER SIZES

Size	No. of Louvers	Glass Width	Glass Height Each Louver
12J	7	16"	4"
13J	11	16"	4"
14J	14	16"	4"
15J	18	16"	4"
22J	7	33 7/8"	4"
23J	11	33 7/8"	4"
24J	14	33 7/8"	4"
25J	18	33 7/8"	4"
32J	14	23 3/8"	4"
33J	22	23 3/8"	4"
34J	28	23 3/8"	4"
35J	36	23 3/8"	4"
42J	14	31 1/2"	4"
43J	22	31 1/2"	4"
44J	28	31 1/2"	4"
45J	36	31 1/2"	4"

Glass Thickness—7/32nds.  
Crystal Sheet clear or obscure.

## HOW TO MEASURE FOR SPECIAL SIZES

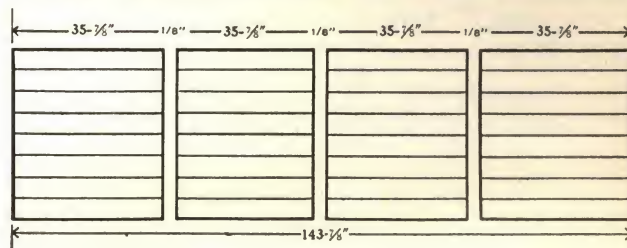
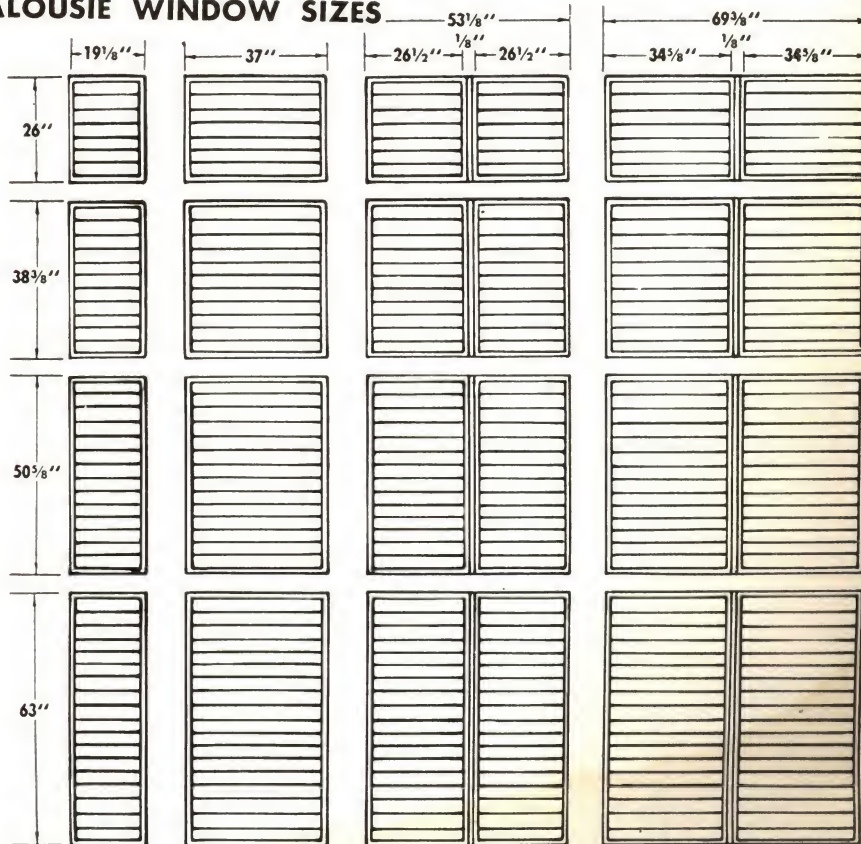
Ualco Jalousies may be ordered in almost any height up to 10'6" and in widths up to our standard 37".

Greater widths may be obtained by "mullioning on" or adding additional sections up to 37". For example, if you have an opening 12' or 144" wide; knowing that 37" is the maximum width for one single jalousie, determine smallest window combination or least number of windows to fill opening. 144" divided by 4, equals 36". Allow 1/8" for each mullion. 36" minus 1/8", equals 35 7/8". Total opening: 35 7/8", plus 1/8", plus 35 7/8" plus 1/8" plus 35 7/8" plus 1/8", equals 143 7/8".

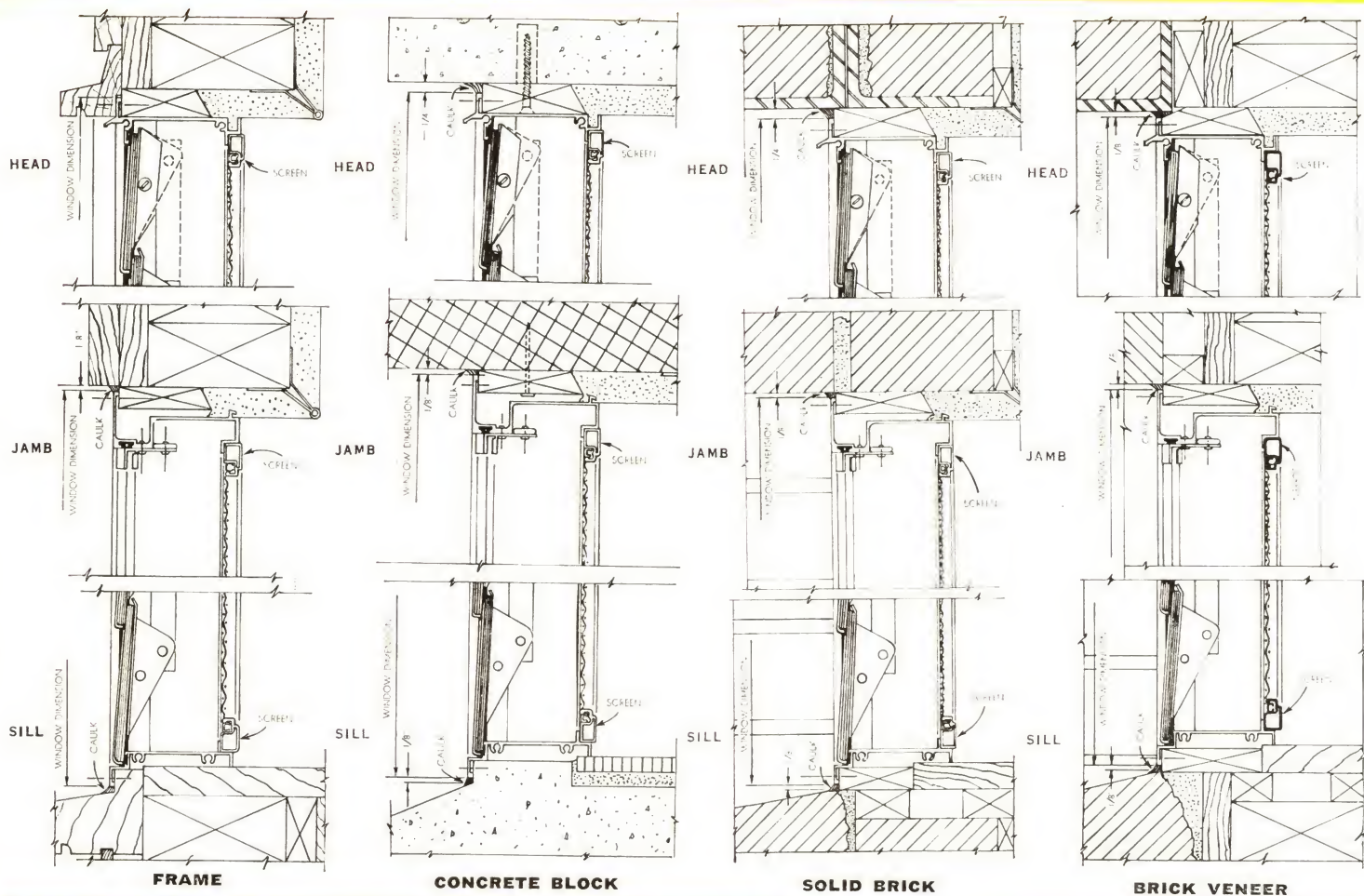
To determine the heights available for special width jalousies, please refer to Ualco Jalousie Price Lists.

The height is contingent on the number of louvers in each window, therefore the heights shown are set and no other heights are available.

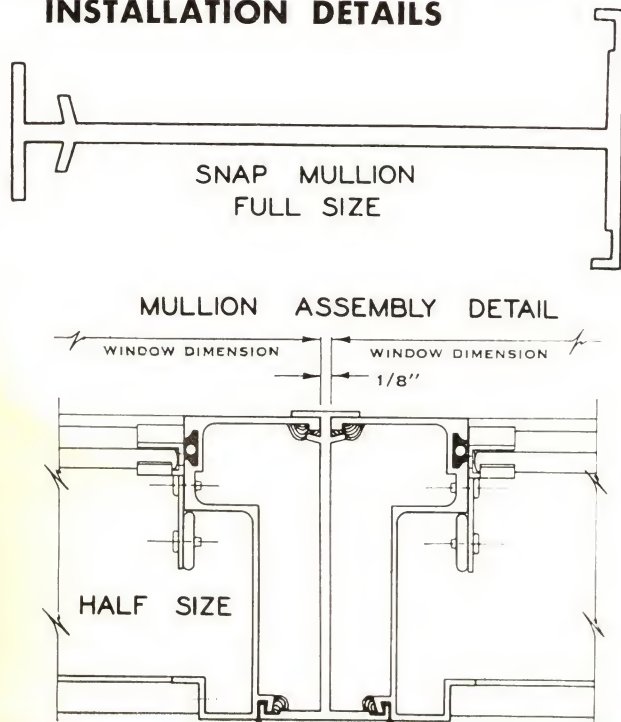
## JALOUSIE WINDOW SIZES



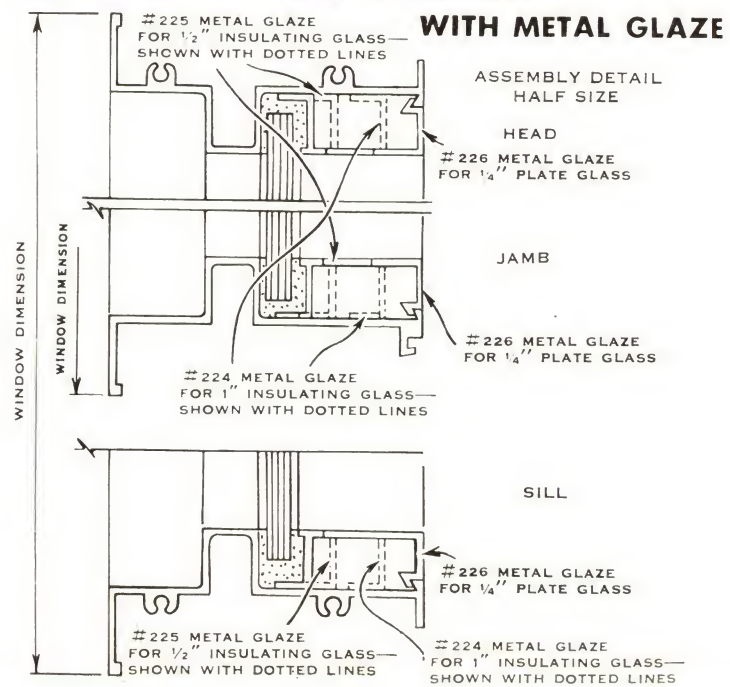




## INSTALLATION DETAILS



## JALOUSIE PICTURE WINDOW







## SPECIFICATIONS

**GENERAL:** Select-A-Vent is an aluminum awning type window of types and sizes shown and shall be complete with equipment and hardware as herein specified and as designed and developed by UALCO.

**MATERIAL:** UALCO Select-A-Vent frame, ventilators, muntins and meeting members shall be not less than 3/32" in thickness. Depth of frame and ventilators members shall not be less than 1 inch. All members shall be extruded aluminum alloy 6063-T5, of not less than 22,000 pounds of tensile strength per square inch.

**CONSTRUCTION:** All corners shall be mortised, tenoned and riveted. An integral-continuous hinge shall be extruded in the frame head section and in the ventilator top section forming a continuous hinge across the complete width of all ventilators. The same shall occur at all ventilators and meeting rails through-out window regardless of combination or arrangement. All muntins are parallel.

**HARDWARE:** Hardware shall be under screen operated and shall consist of a push bar jointed in such a manner to permit the bar to be folded back against the frame or meeting rail members when the ventilator is in the half way open position or completely closed position.

The ventilator shall be completely locked by the push bar when in the closed position. All hardware shall be of substantial construction, uniform in design and finish, of aluminum, white bronze or zinc.

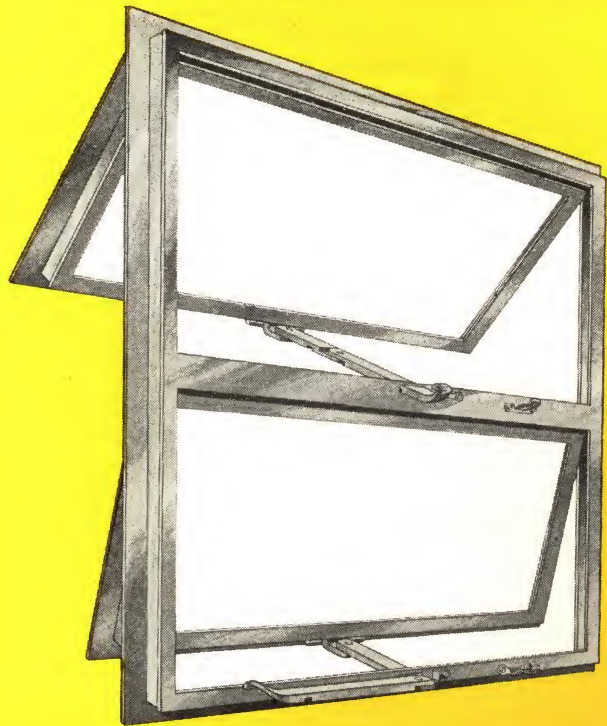
**FINISH:** Select-A-Vent surfaces shall be given a chemical etch to produce an unblemish soft satin finish and, before shipment from factory, shall be given a coat of clear protective lacquer.

**SCREENS:** Screens shall be either of aluminum rolled sections or aluminum extruded sections with reinforced angle corners. Screen mesh shall be 18 x 14 mesh aluminum wire and held in place by removable spline. All screen shall be mounted by clips on the inside.

**ERECTION:** All openings must be completely prepared to receive the Ualco Select-A-Vent window. The window shall be set plumb and true. All ventilators shall be closed and locked before glazing for smooth operation and tight fitting.

NOTE—All hardware shall be installed before glazing is started.

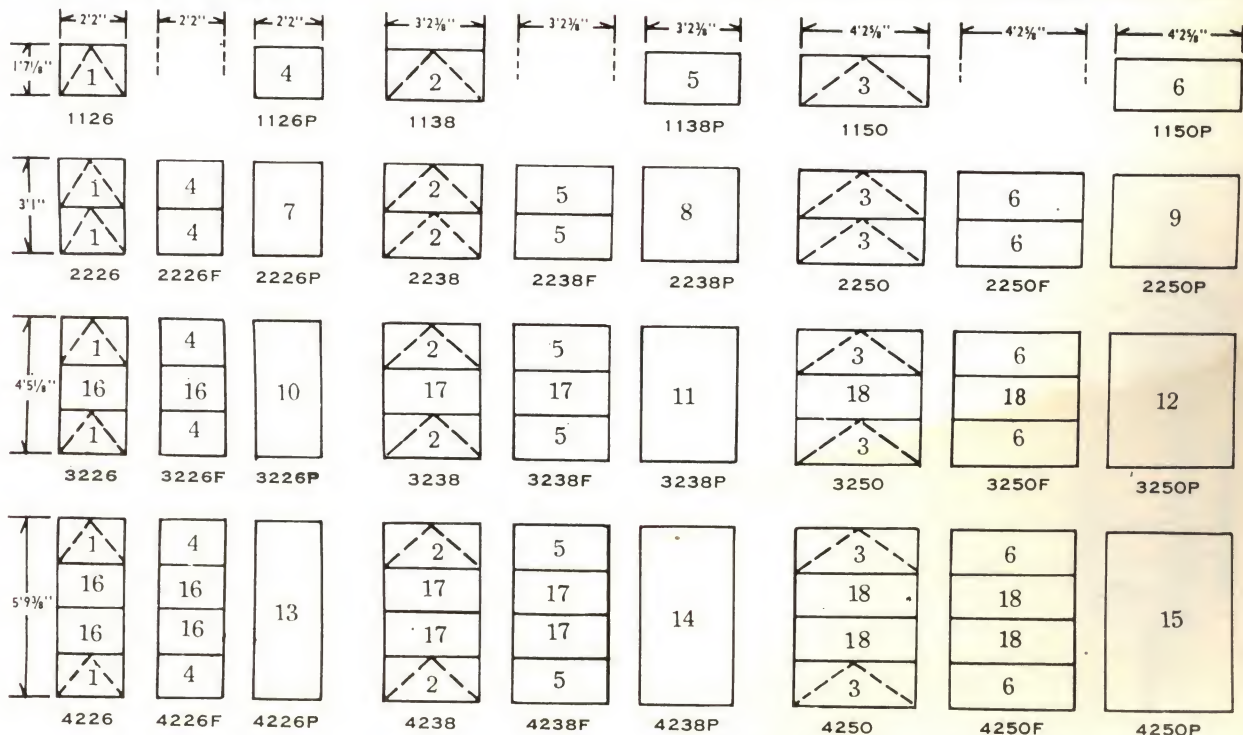
**GLAZING:** All Ualco Select-A-Vent shall be glazed on the outside. Glazing shall be done by others.



## GLASS SIZES

1	23" x 16"	10	24" x 51"
2	35" x 16"	11	36-1/4" x 51"
3	47-1/4" x 16"	12	48-1/2" x 51"
4	24" x 17-1/4"	13	24" x 67-1/4"
5	36-1/4" x 17-1/4"	14	36-1/4" x 67-1/4"
6	48-1/2" x 17-1/4"	15	48-1/2" x 67-1/4"
7	24" x 35"	16	24" x 16"
8	36-1/4" x 35"	17	36-1/4" x 16"
9	48-1/2" x 35"	18	48-1/2" x 16"

## SELECT-A-VENT SIZES



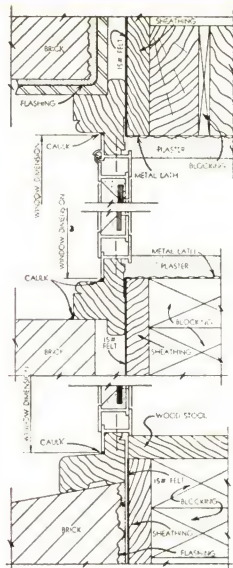


## WOOD SURROUND IN BRICK VENEER

HEAD SECTION

JAMB SECTION

SILL SECTION

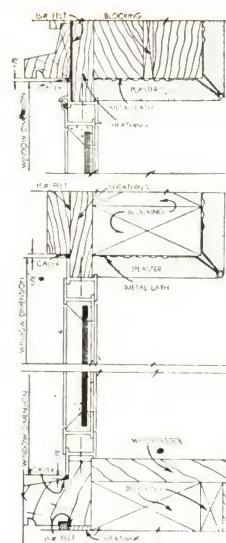


## FRAME CONSTRUCTION

HEAD SECTION

JAMB SECTION

SILL SECTION

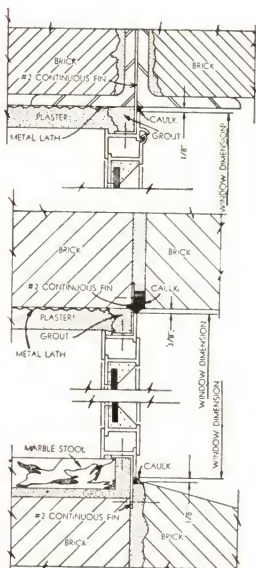


## SOLID BRICK CONSTRUCTION

HEAD SECTION

JAMB SECTION

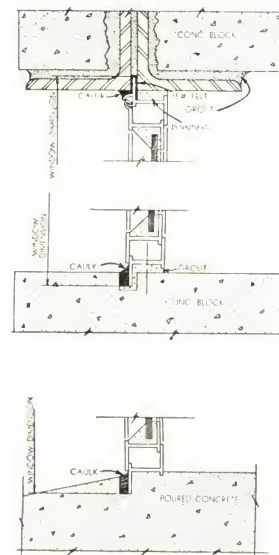
SILL SECTION



HEAD SECTION

JAMB SECTION

SILL SECTION

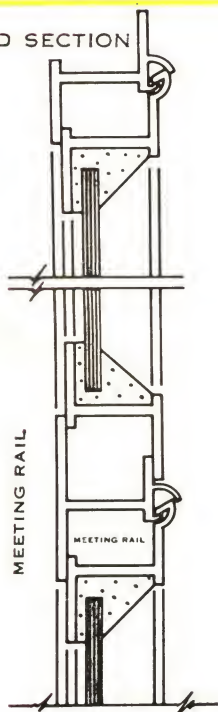


## CONCRETE BLOCK

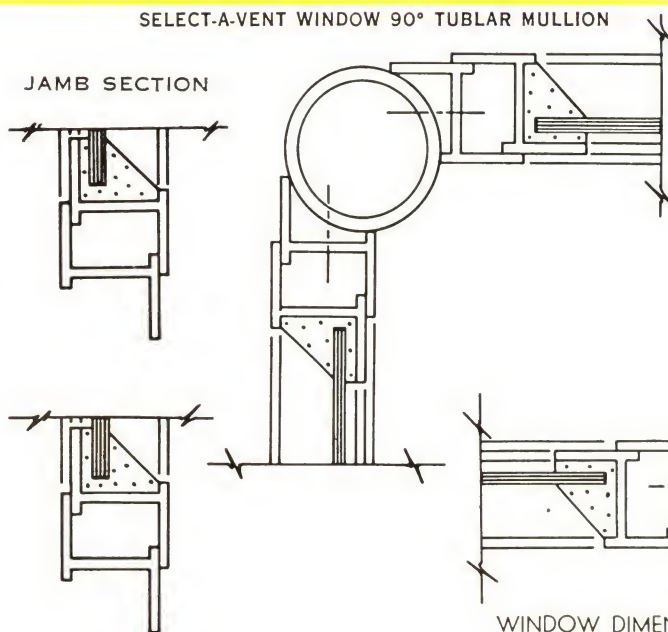
HEAD SECTION

JAMB SECTION

SILL SECTION

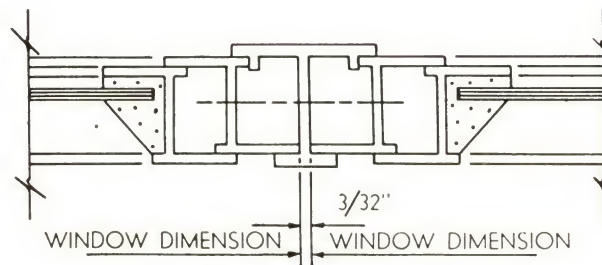


SELECT-A-VENT WINDOW 90° TUBULAR MULLION



## ASSEMBLY DETAILS

SCALE 1/2 SIZE



TYPICAL WINDOW 180° MULLION





# ALUMINUM HORIZONTAL SLIDING WINDOWS

5a  
Un

## SPECIFICATIONS

**GENERAL:** Ualco Horizontal Sliding Window types and sizes shown herein as furnished by Union Aluminum Co., Inc., Sheffield, Alabama.

**MATERIAL:** Ualco Horizontal Sliding windows shall be especially designed aluminum extruded shapes of 6063-T5 alloy having an ultimate tensile strength of not less than 22,000 P.S.I. with a minimum thickness of .062".

**CONSTRUCTION:** Frame sections shall be assembled at the corners with stainless steel screws to insure strength and a tight rigid corner. Also windows can be shipped knocked down and assembled in the field.

Frame shall be weatherstripped at head and sill sections with continuous stainless steel weatherstripping which shall be securely attached to the tracks provided for the sash to glide on.

Vertical sections of frame shall, when in closed and locked position, engage a stainless steel weatherstrip inserted in the frame jamb section.

An aluminum guide shall be provided at the head of each sash, attached to the frame which shall prevent removal of the sash when in the closed and locked position.

Vent sash sections shall be assembled by means of stainless steel screws, as all corners.

Sash sections shall be accurately manufactured and fitted and shall be easily removed from the frame for cleaning or reglazing purposes, when in the unlocked position.

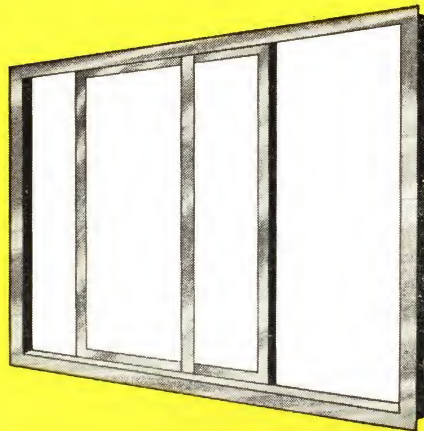
**HARDWARE:** Each moveable sash shall be provided with locking hardware manually operated. Stainless steel lock and keeper is designed for trouble free and positive locking.

**SCREENS:** Window screens shall be made of extruded aluminum alloy 6063-T5 fitted with 18 x 14 mesh aluminum cloth.

**ERECTIONS:** (Included under another contract)

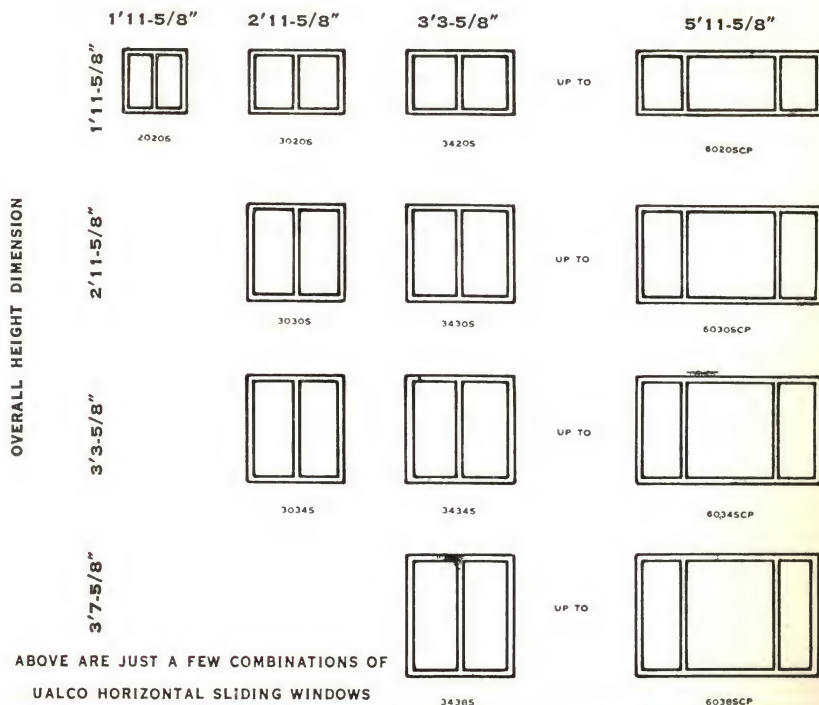
Erect windows in prepared openings according to manufacturers drawings. Window frames must be set plumb and level so that sliding sash shall retain proper weathering contact to the frame. Do not at any time twist or force window in an opening too small or in an opening too large.

**GLAZING:** Glazing of ventilators shall be done at the factory or in the field. Windows shall be glazed in with vinyl glazing channel and using DSB glass.



## HORIZONTAL SLIDING WINDOWS

OVERALL WIDTH DIMENSION



ABOVE ARE JUST A FEW COMBINATIONS OF  
UALCO HORIZONTAL SLIDING WINDOWS

## GLASS SIZES

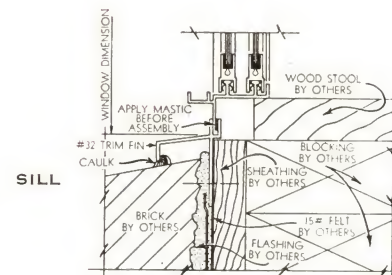
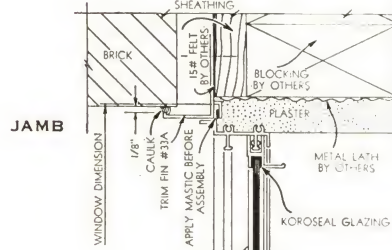
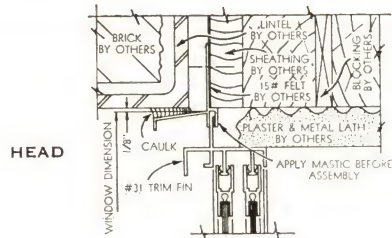
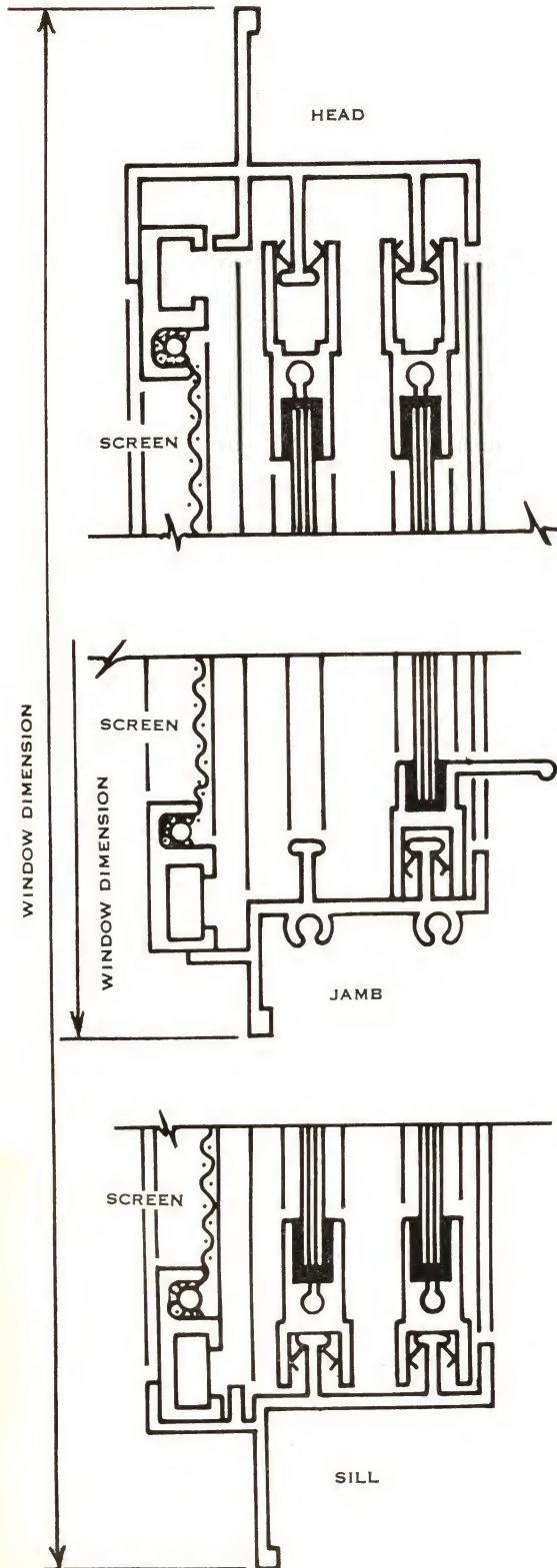
Normal Size	Window Width	Dimension Height	Glass Size	Normal Size	Window Width	Dimension Height	Glass Size
2020S	1' 11-5/8"	1' 11-5/8"	10-1/2" x 20-1/16"	3034S	2' 11-5/8" x 3' 3-5/8"		16-1/2" x 36-1/16"
3020S	2' 11-5/8" x 1' 11-5/8"		16-1/2" x 20-1/16"	3434S	3' 3-5/8" x 3' 3-5/8"		18-1/2" x 36-1/16"
3420S	3' 3-5/8" x 1' 11-5/8"		18-1/2" x 20-1/16"	3834S	3' 7-5/8" x 3' 3-5/8"		20-1/2" x 36-1/16"
3820S	3' 7-5/8" x 1' 11-5/8"		20-1/2" x 20-1/16"	4034S	3' 11-5/8" x 3' 3-5/8"		22-1/2" x 36-1/16"
4020S	3' 11-5/8" x 1' 11-5/8"		22-1/2" x 20-1/16"	4834S	4' 7-5/8" x 3' 3-5/8"		26-1/2" x 36-1/16"
4820S	4' 7-5/8" x 1' 11-5/8"		26-1/2" x 20-1/16"	5434S	5' 3-5/8" x 3' 3-5/8"		30-1/2" x 36-1/16"
5420S	5' 3-5/8" x 1' 11-5/8"		30-1/2" x 20-1/16"	6034S	5' 11-5/8" x 3' 3-5/8"		34-1/2" x 36-1/16"
6020S	5' 11-5/8" x 1' 11-5/8"		34-1/2" x 20-1/16"				
3030S	2' 11-5/8" x 2' 11-5/8"		16-1/2" x 32-1/16"	3438S	3' 3-5/8" x 3' 7-5/8"		18-1/2" x 40-1/16"
3430S	3' 3-5/8" x 2' 11-5/8"		18-1/2" x 32-1/16"	3838S	3' 7-5/8" x 3' 7-5/8"		20-1/2" x 40-1/16"
3830S	3' 7-5/8" x 2' 11-5/8"		20-1/2" x 32-1/16"	4038S	3' 11-5/8" x 3' 7-5/8"		22-1/2" x 40-1/16"
4030S	3' 11-5/8" x 2' 11-5/8"		22-1/2" x 32-1/16"	4838S	4' 7-58"/ x 3' 7-5/8"		26-1/2" x 40-1/16"
4830S	4' 7-5/8" x 2' 11-5/8"		26-1/2" x 32-1/16"	5438S	5' 3-5/8" x 3' 7-5/8"		30-1/2" x 40-1/16"
5430S	5' 3-5/8" x 2' 11-5/8"		30-1/2" x 32-1/16"	6038S	5' 11-5/8" x 3' 7-5/8"		34-1/2" x 40-1/16"
6020S	5' 11-5/8" x 2' 11-5/8"		34-1/2" x 32-1/16"				

**NOTE:** The maximum height for any sliding window (special or standard) will be 3' 7-5/8".

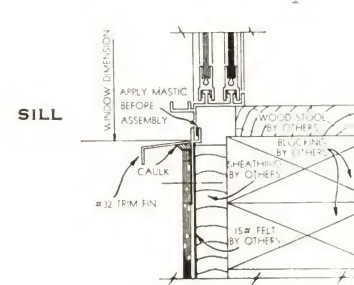
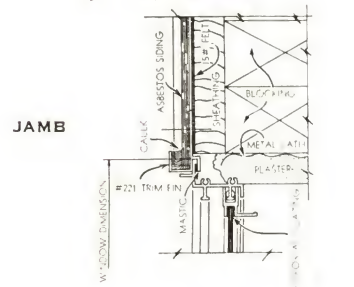
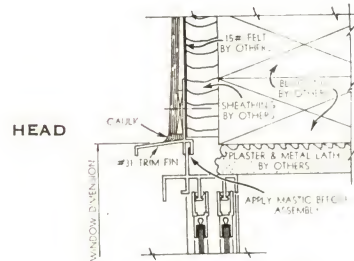


**HORIZONTAL SLIDING  
ASSEMBLY DETAILS**

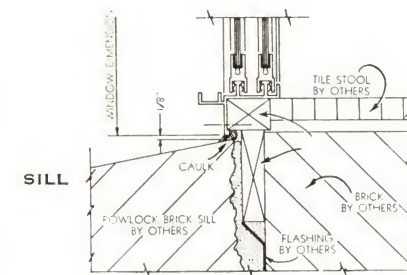
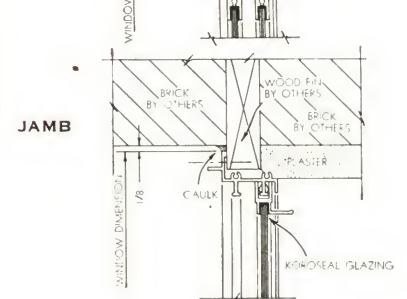
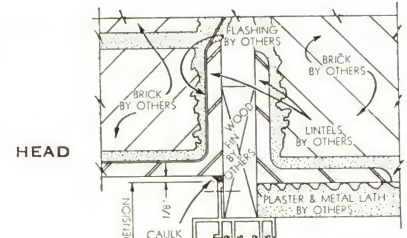
**SCALE FULL SIZE**



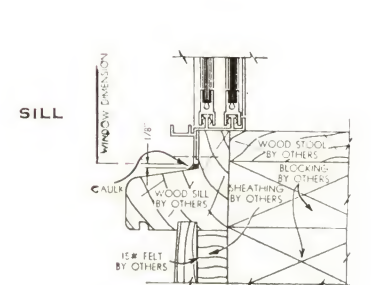
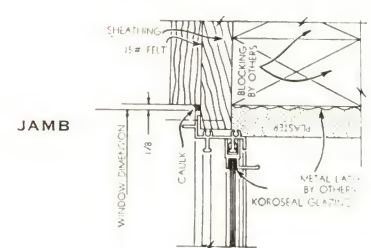
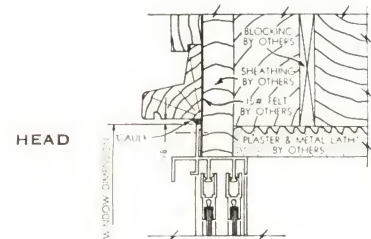
**BRICK VENEER  
WITH FIN TRIM**



**ASBESTOS SIDING  
WITH FIN TRIM**

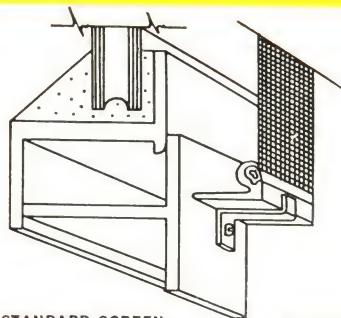


**SOLID BRICK CONST.**



**FRAME CONSTRUCTION**





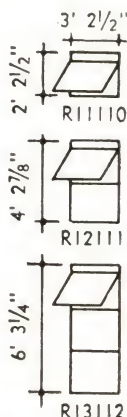
SCREEN ASSEMBLY  
DETAIL FOR  
WICKET SCREEN  
USING CAM  
HANDLE LOCK.

SCREEN ASSEMBLY

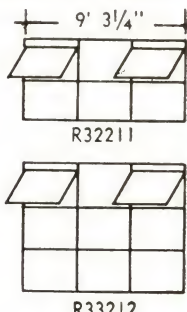
STANDARD SCREEN  
SHAPES WILL BE  
USED FOR UNDER  
SCREEN ROTO  
OPERATOR.

ROUGH OPENING SUB. 1/4" FROM  
WINDOW DIM.

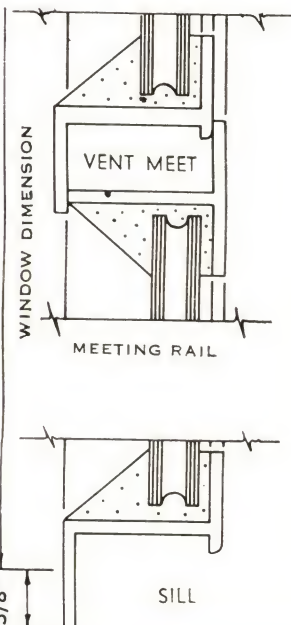
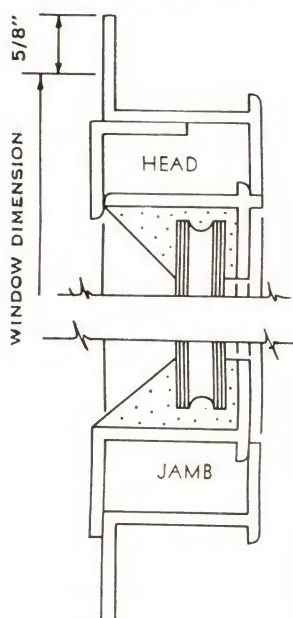
WINDOW  
SIZES



GLASS SIZES  
FIXED—36" X 24"  
VENT—34" X 22 1/4"



ASSEMBLY DETAILS



## SPECIFICATIONS

**GENERAL**—All windows shall be UALCO standard sizes of project-out or project-in type, manufactured by the Union Aluminum Co., Inc., Sheffield, Alabama.

**MATERIAL**—All sections shall be 1/8" thickness. Ventilator sections shall be 1 3/4" deep and frame sections shall be 1 5/8" deep. Windows shall be extruded aluminum alloy 6063-T5 and having a tensile strength of about 22,000 P.S.I. Muntin sections shall be 1 1/2" deep.

**CONSTRUCTION**—Frame and ventilator corners shall be mortise and tenon and securely riveted at corners. Ranch wall windows are designed for outside glazing and plate glass 1/2" thermopane glass.

**VENTILATORS**—Project-out or project-in vents have stainless steel friction shoes, spring loaded to maintain constant friction shoe pressure at all positions of the ventilator opening and balance arms which position ventilator up to 50 per cent maximum opening.

Ventilators shall have double contact weathering surfaces—parallel to the face of the window.

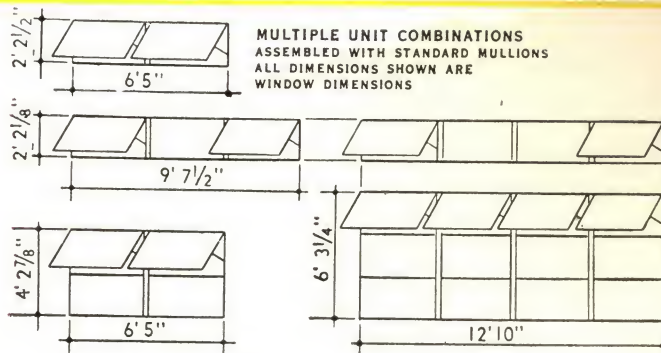
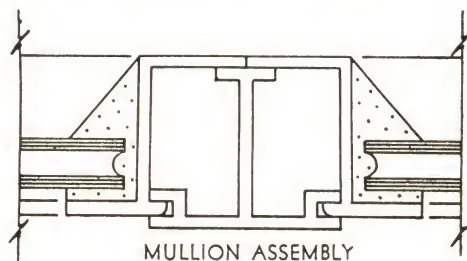
**SCREENS**—Windows are prepared for screens at additional cost. Screens for project-out vents are mounted on the inside. Screens for project-in vents are mounted on the outside. (Removable from inside). Screen frames are of extruded aluminum 6063-T5 alloy and the wire mesh shall be aluminum wire mesh 14 x 18.

**MULLION**—Mullion shall be UALCO standard Ranch Wall window TEE mullion.

**HARDWARE**—Cam handle or spring catch hardware is optional on project-in vents. Project-out vents use cam handle or ring type cam handle. All hardware shall be with bronze and clear lacquer finished.

**GLAZING**—UALCO Ranch Wall windows are designed for outside glaze and will accommodate thermopane or T window.

MULLION ASSEMBLY DETAILS







## SPECIFICATIONS

### SECTIONS AND CONSTRUCTION:

Extruded aluminum shapes  $\frac{1}{8}$ " minimum thickness. These windows are designed for inside glazing. Outside frame sections are  $1\frac{1}{2}$ " and  $1\frac{1}{8}$ " deep and provide  $\frac{1}{2}$ " wall bearing. Frame and ventilator combined depth horizontal is  $1\frac{1}{2}$ " and  $2\frac{1}{2}$ " vertical. Corners of frame, ventilator and muntins are mortised and tenoned—then swaged. Muntins are  $1\frac{1}{8}$ " deep with intersections mechanically formed without distortion and for added strength.

### VENTILATORS:

Project-out ventilators open out at bottom, project-in ventilators open in at top. Ventilators have stainless steel sliding friction shoes, pivoting at top of project-out ventilators and at the bottom of project-in ventilators. Concealed springs maintain constant friction shoe pressure at all positions of ventilator opening, and balance arms which position ventilator up to 50 percent maximum opening.

### WEATHERING:

Ventilators have two weathering surfaces parallel to the face of the window.

### SCREENS:

Windows are prepared for screens at additional cost. Screens for project-out vents are mounted inside and project-in vents are screen mounted on the outside. (Removable from inside.) Screen frames are of extruded aluminum. Screen cloth of aluminum, 14 x 18 mesh.

### MULLION:

Adjustable from  $1\frac{1}{8}$ " minimum to  $2\frac{1}{8}$ " maximum. Extruded heavy aluminum tee section. Flat surface outside. Inside cover plate available at extra cost, or plate mullion if specified.

### OPERATING HARDWARE:

Cast white bronze, commercial type operating hardware, with satin finish or lacquered finish as specified. Trouble-free operation and maintenance.

### PROJECT OUT VENTILATORS

INSIDE GLAZE: Straight end handle UN-12 locks horizontally on Bronze strike UN-4 and is standard. Pole ring handle UN-14 also locks horizontally on strike plate UN-4 and is available on request as alternate.

OUTSIDE GLAZE: Straight end handle UN-1 locks horizontally on Bronze strike UN-4. Pole ring end UN-2 locking horizontally on strike UN-4 is available on request as alternate.

### PROJECT IN VENTS

INSIDE GLAZE: Straight end handle UN-3 locking horizontally on UN-5, UN-6, UN-8, or UN-17 strikes, depending on location of vents is standard. Pole end handle UN-15 using same strikes is available as alternate. Spring catch pole ring handle UN-10 also available as alternate.

NOTE: In all units bottom vent glaze is always same as top vent glaze regardless of direction of projection.

### MOUNTING CLIPS:

Made of aluminum in a variety of sizes and shapes.

### GLAZING:

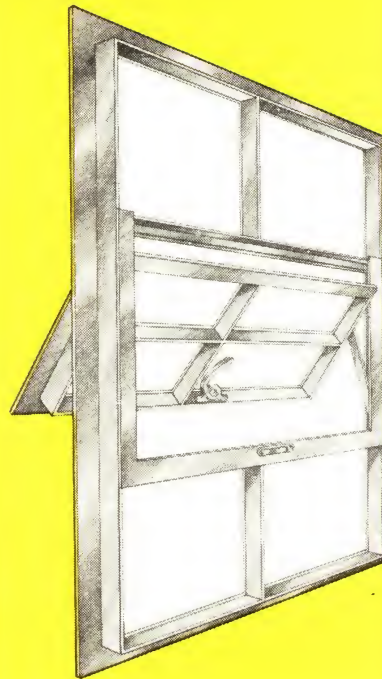
Single lights inside bed and face compound standard under another contract.

### THERMOPANE OR TWINWINDOW GLAZING:

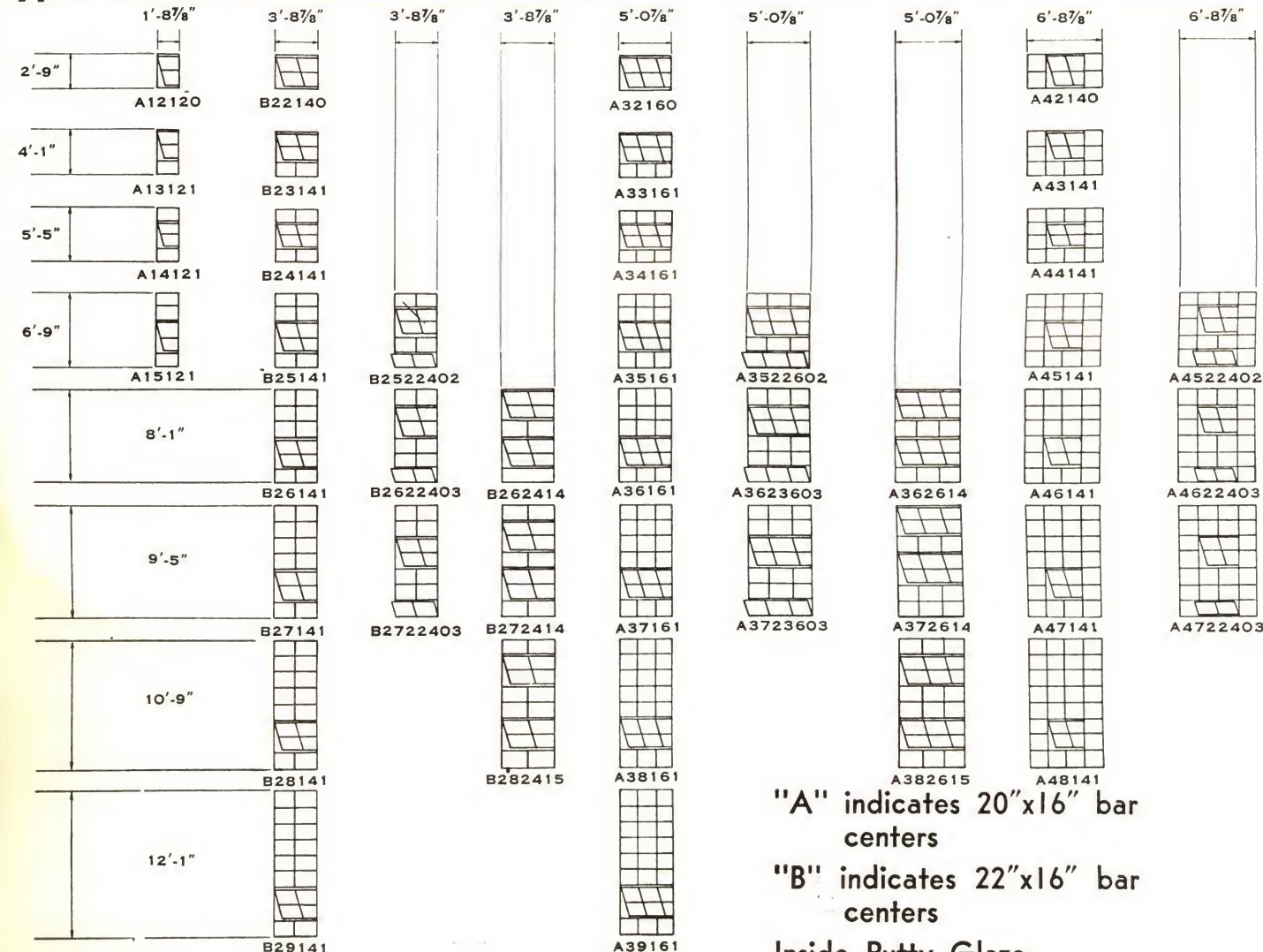
UALCO Projected Windows are of extra deep extrusions for installation of  $\frac{1}{2}$ " maximum Thermopane or Twinwindow.

### GLAZING SUGGESTIONS:

Bed with glazing compound. Support panes with blocks at lower corner and insert glazing clips, and face with compound.



## Types and Sizes



"A" indicates 20"x16" bar centers  
"B" indicates 22"x16" bar centers  
Inside Putty Glaze.





## SPECIFICATIONS

## SECTIONS AND CONSTRUCTION:

Extruded aluminum shapes  $\frac{1}{8}$ " minimum thickness. Alum. alloy 6063-T5—Has 22000 PSI tensile strength. These windows are designed for outside glazing. Outside frame sections are unequal leg sections  $1\frac{1}{8}$ " and  $1\frac{1}{4}$ " deep and provide  $\frac{5}{8}$ " wall bearing. Frame and ventilator combined depth horizontal is  $1\frac{1}{4}$ " and 2-15/16" vertical. Corners of frame, ventilator and muntins are mortised and tenoned—then swaged. Muntins are  $1\frac{1}{8}$ " deep, with intersections mechanically formed without distortion and for added strength.

## VENTILATORS:

Project-out ventilators open out at bottom, project-in ventilators open in at top. Ventilators have stainless steel sliding friction shoes, pivoting at top of project-out ventilator and at the bottom of project-in ventilator. Concealed springs maintain constant friction shoe pressure at all positions of ventilator opening, and balance arms which position ventilator up to 50 percent maximum opening.

## WEATHERING:

Ventilators have two weathering surfaces parallel to the face of the window.

## SCREENS:

Windows are prepared for screens at additional cost. Screens for project-out vents are mounted inside and project-in vents are screen mounted on the outside. (Removable from inside.) Screen frames are of extruded aluminum. Screen cloth of aluminum, 14x18.

## MULLION:

Adjustable from  $1\frac{1}{8}$ " minimum to  $2\frac{3}{4}$ " maximum. Extruded heavy aluminum tee section. Flat surface outside. Inside cover plate available at extra cost. Or  $3\frac{1}{8}$ " mullion variable from  $2\frac{1}{8}$ " to  $3\frac{1}{8}$ " max.

## OPERATING HARDWARE:

Cast white bronze, commercial type operating hardware, with satin finish or lacquered finish as specified. Trouble-free operation and maintenance.

## PROJECT OUT VENTILATORS:

INSIDE GLAZE: Straight end handle UN-12 locks horizontally on Bronze strike UN-4 and is standard. Pole ring handle UN-14 also locks horizontally on strike plate UN-4 and is available on request as alternate.

OUTSIDE GLAZE: Straight end handle UN-1 locks horizontally on Bronze strike UN-4. Pole ring end UN-2 locking horizontally on strike UN-4 is available on request as alternate.

## PROJECT IN VENTS:

INSIDE GLAZE: Straight end handle UN-3 locking horizontally on UN-5, UN-6, UN-8, or UN-17 strikes, depending on location of vents is standard. Pole end handle UN-15 using same strikes is available as alternate. Spring catch pole ring handle UN-10 also available as alternate.

NOTE: In all units bottom vent glaze is always same as top vent glaze regardless of direction of projection.

## MOUNTING CLIPS:

Made of aluminum in a variety of sizes and shapes.

## GLAZING:

Single lights outside bed and face compound standard under another contract.

## THERMOPANE OR TWINOW GLAZING:

UALCO Projected Windows are of extra deep extrusions for installation of  $\frac{1}{2}$ " Thermopane or Twinow.

## GLAZING SUGGESTION:

Bed with glazing compound. Support panes with blocks at lower corners and insert glazing clips, and face with compound.

## INTERMEDIATE PROJECTED Types and Sizes





Ualco Pivoted Windows are designed for permanence and rugged use. Made of extra heavy solid extruded aluminum. Ventilators are accurately balanced and assure maintenance free operation. Hardware is heavy duty. Ualco Pivoted Windows may be installed as units or as continuous walls of glass. They meet all construction requirements for light, ventilation and economy.

## SPECIFICATIONS

### SECTIONS AND CONSTRUCTION:

Extruded aluminum shapes  $\frac{1}{8}$ " minimum thickness. These windows are designed for inside glazing. Outside frame sections are  $1\frac{1}{2}$ " and  $1\frac{3}{8}$ " deep and provide  $\frac{5}{8}$ " wall bearing. Frame and ventilator combined depth horizontal is  $1\frac{3}{4}$ " and 2" vertical. Corners of frame, ventilator and muntins are mortised and tenoned—then swedged. Muntins are  $1\frac{1}{2}$ " deep with intersections mechanically formed without distortion and for added strength.

### PIVOT: (Non-Screened):

Ventilators have integral pivot located 2-1/16" above center of ventilator.

### PIVOT HARDWARE:

Push bar type for ventilators within reach and spring catch and chain for ventilators out of reach.

### WEATHERING:

Ventilators have two weathering surfaces.

### MULLION:

Adjustable from  $1\frac{1}{8}$ " minimum to  $2\frac{1}{8}$ " maximum. Extruded heavy aluminum tee section. Flat surface outside. Inside cover plate available at extra cost, or plate mullion if specified.

### MOUNTING CLIPS:

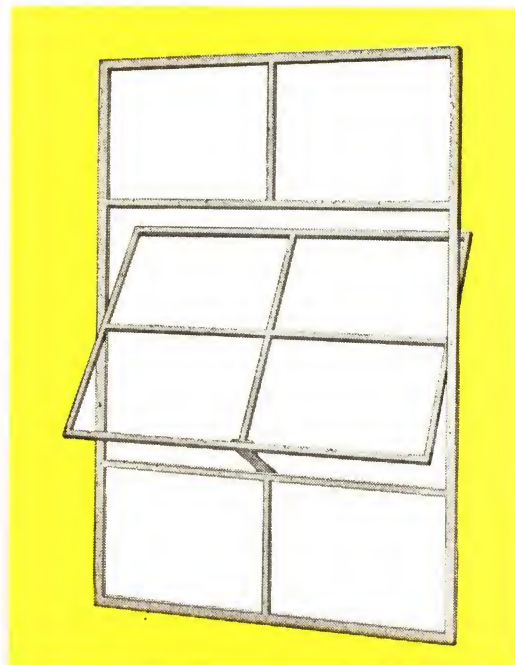
Made of aluminum in a variety of sizes.

### GLAZING:

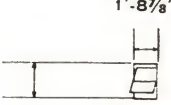







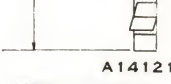










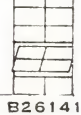





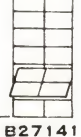
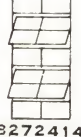





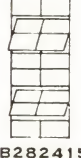






Single lights inside bed and face compound standard under another contract.

### GLAZING SUGGESTIONS:

Bed with glazing compound. Support panes with blocks at lower corners and insert glazing clips and face with compound.



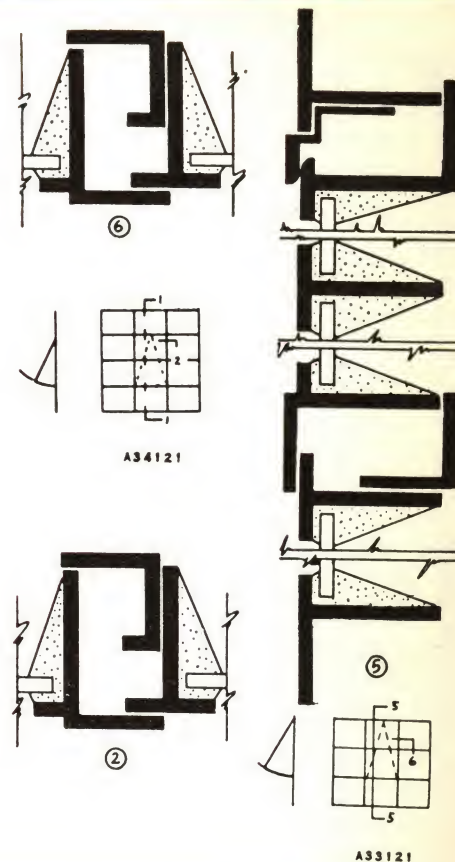
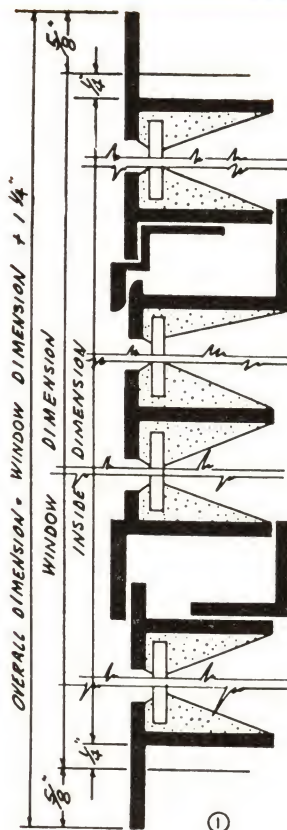
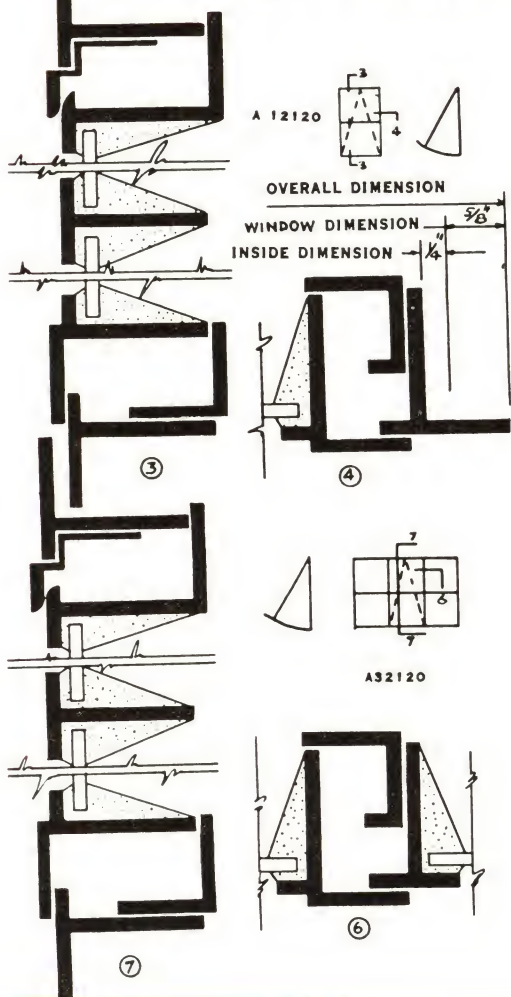
## PIVOTED Types & Sizes

	1'-8 $\frac{7}{8}$ "	3'-8 $\frac{7}{8}$ "	3'-8 $\frac{7}{8}$ "	5'-0 $\frac{7}{8}$ "	5'-0 $\frac{7}{8}$ "	6'-8 $\frac{7}{8}$ "	6'-8 $\frac{7}{8}$ "
2'-9"	 A12120	 B22140		 A32160		 A42140	
4'-1"	 A13121	 B23141		 A33161		 A43141	
5'-5"	 A14121	 B24141		 A34161		 A44141	
6'-9"	 A15121	 B25141	 B25142	 A35161	 A35162	 A45141	 A45142
8'-1"		 B26141	 B262414	 A36161	 A362614	 A46141	 A462414
9'-5"		 B27141	 B272414	 A37161	 A372614	 A47141	 A472414
10'-9"		 B28141	 B282415	 A38161	 A382615	 A48141	 A482415
12'-1"		 B29141		 A39161			

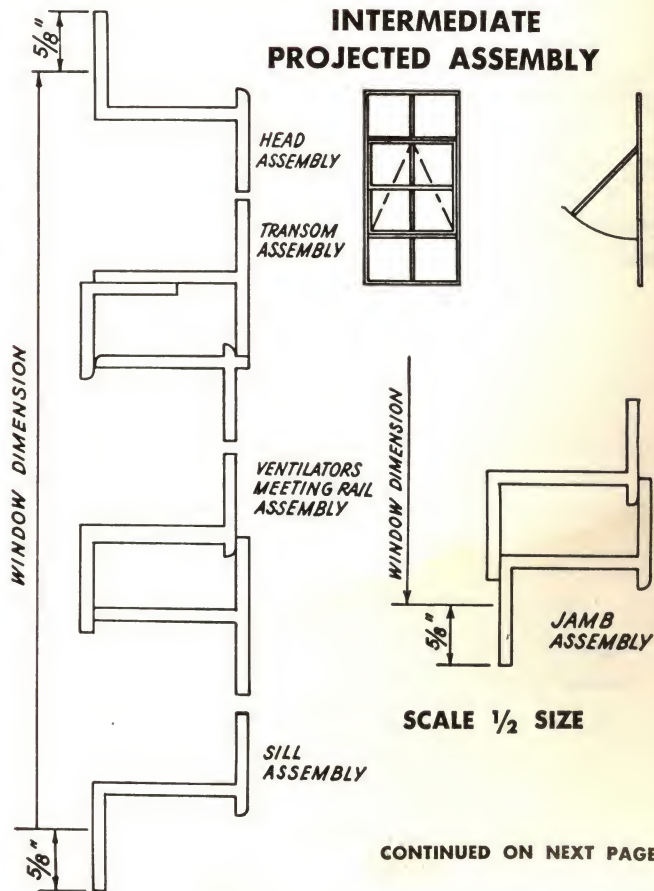
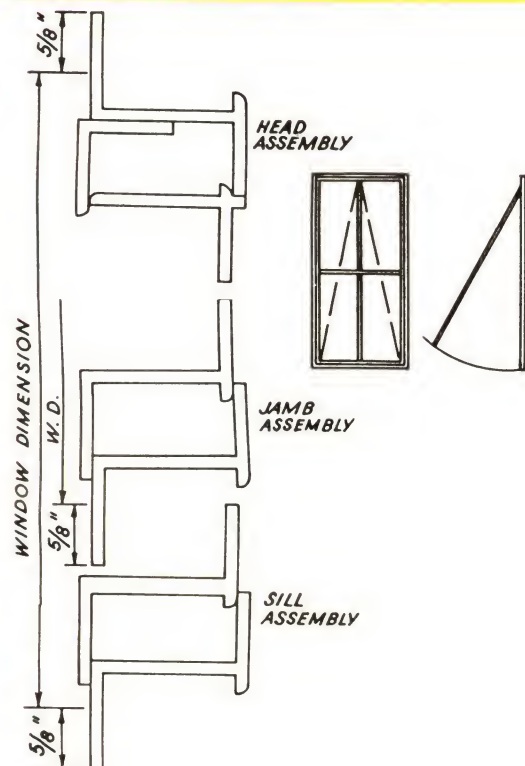


DETAILS PROJECTED ASSEMBLY

★ SCALE 1/2 SIZE



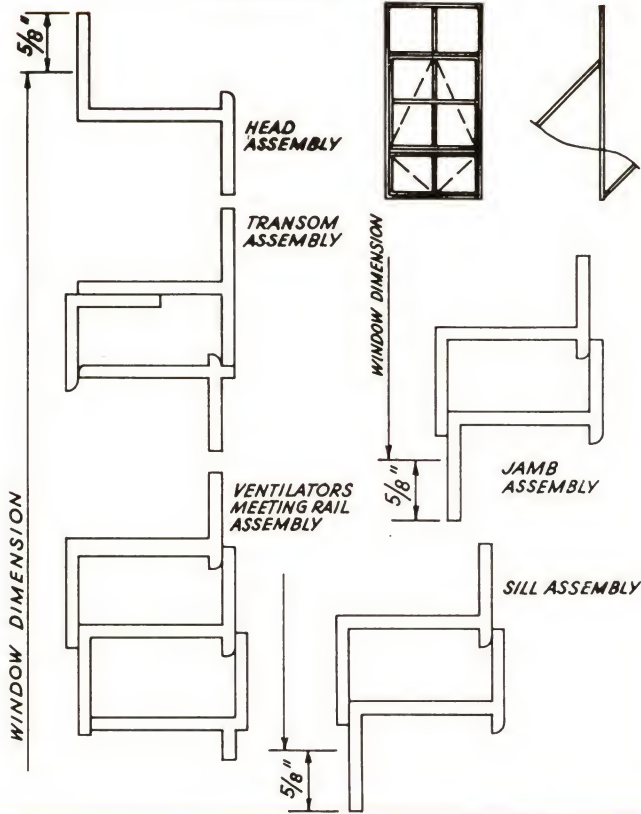
● DETAILS  
INTERMEDIATE  
PROJECTED ASSEMBLY



CONTINUED ON NEXT PAGE

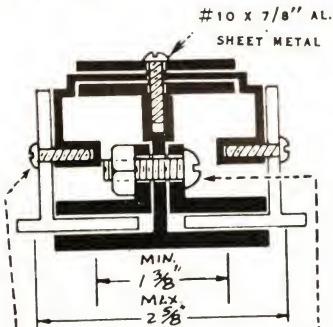


## INTERMEDIATE CONTINUED



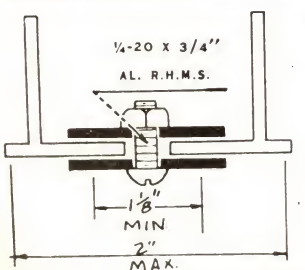
## MULLION ASSEMBLY DETAILS

**TEE MULLION NO. R-63**  
PIVOTED & COMMERCIAL PROJECTED  
180° TEE MULLION & COVER PLATE ASSEMBLY



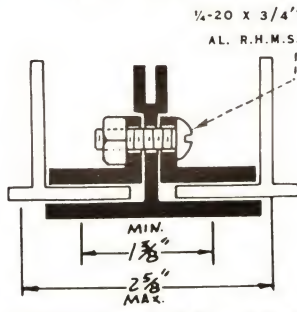
**#10 X 1/2 AL. SHEET METAL (2)**  
**1/4-20 X 3/4" AL. R.H.M.S.**  
VARIABLE MULLION, 1/4" ADJUSTMENT  
FROM 1 3/8" TO 2 5/8"

**PLATE MULLION NO. M-62**  
PIVOTED & COMMERCIAL PROJECTED



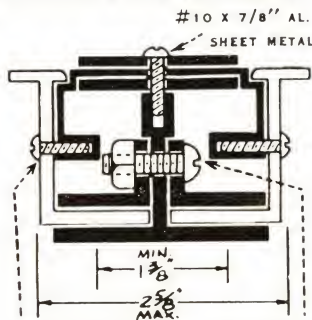
**180 DEGREE PLATE MULLION ASSEMBLY**  
VARIABLE FROM 1 1/8" TO 2"  
7/8" ADJUSTMENT  
FOR WINDOWS UP TO 5'5" IN HEIGHT

**TEE MULLION NO. R-62**  
HORIZONTAL  
PIVOTED & COMMERCIAL PROJECTED  
180° VARIABLE TEE MULLION



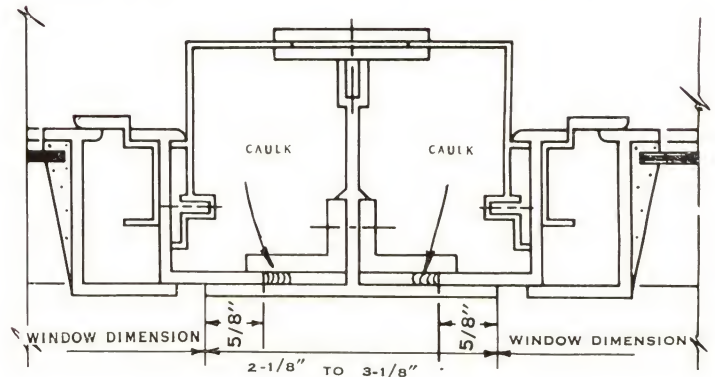
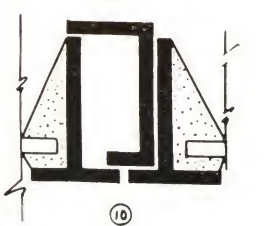
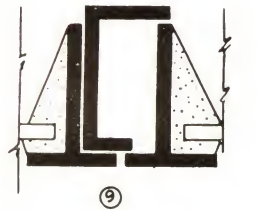
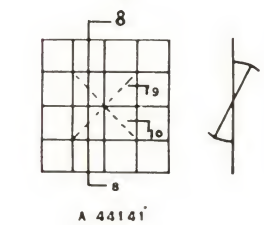
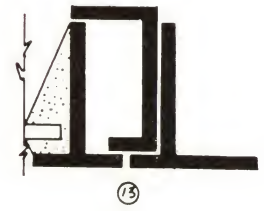
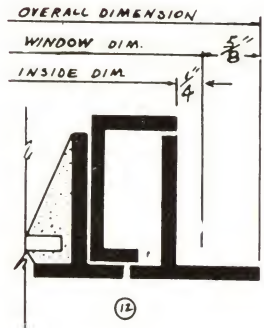
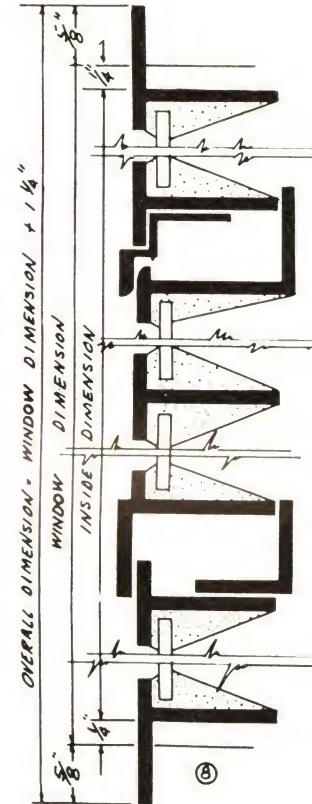
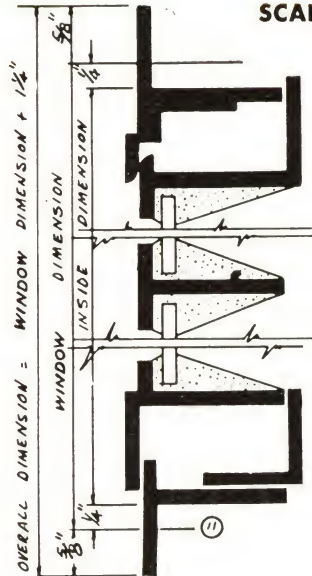
ADJUSTMENT FROM 1 3/8" TO 2 5/8"  
FOR WINDOWS UP TO 12'-1" IN HEIGHT

**TEE MULLION NO. R-63**  
INTERMEDIATE PROJECTED



**#10 X 1/2 AL. SHEET METAL (2)**  
**1/4-20 X 3/4" AL. R.H.M.S.**  
VARIABLE MULLION, 1/4" ADJUSTMENT  
FROM 1 3/8" TO 2 5/8"

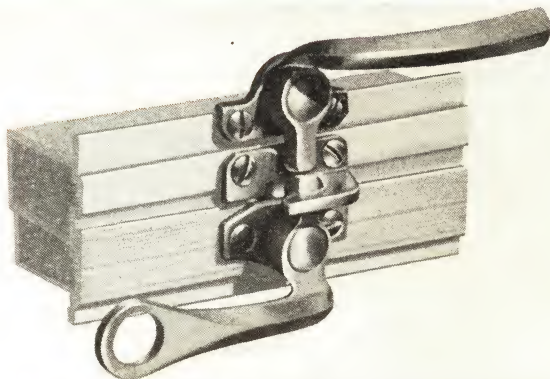
SCALE 1/2 SIZE



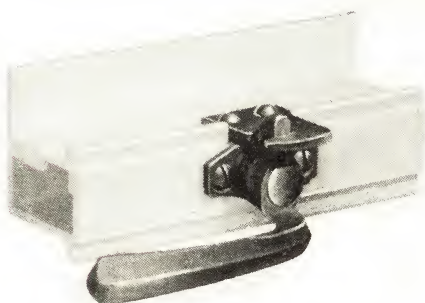


**HARDWARE**

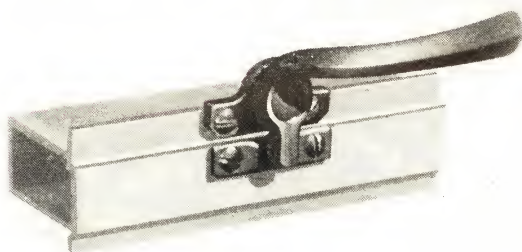
UN-1 CAM LOCK HANDLE ▼



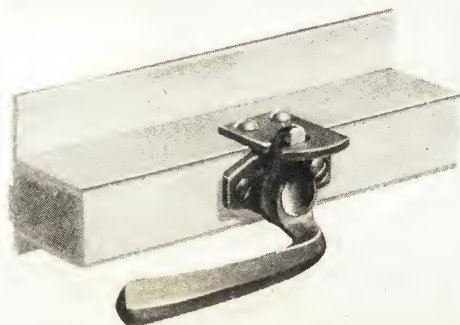
UN-15 CAM LOCK HANDLE ▲ UN-5 COMB. STRIKE & KEEPER



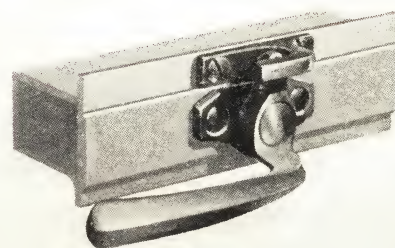
UN-17 KEEPER UN-3 CAM LOCK HANDLE



UN-4 STRIKE PLATE UN-1 CAM LOCK HANDLE

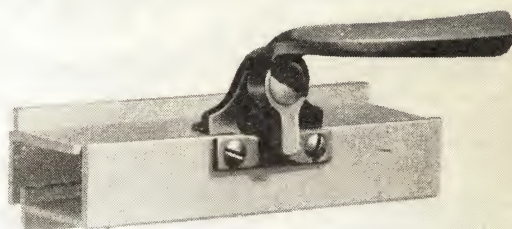


UN-17 KEEPER UN-3 CAM LOCK HANDLE



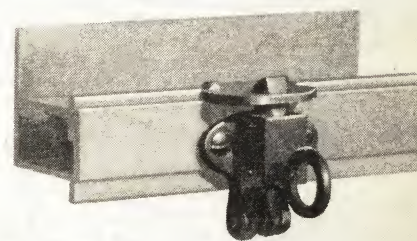
UN-6 KEEPER

UN-3 CAM LOCK HANDLE



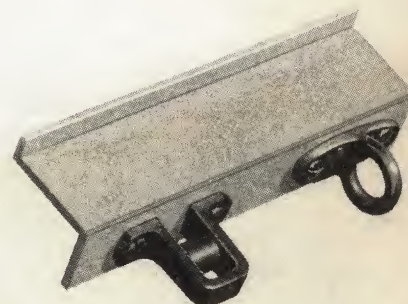
UN-12 CAM LOCK HANDLE

UN-4 STRIKE PLATE



UN-7 KEEPER

UN-10 SPRING CATCH



UN-16 FOR CHAIN PULL ROLLER

UN-9 POLE RING



## SPECIFICATIONS

### GENERAL

All windows shall be UALCO standard sizes of project-in or project-out type, Manufactured by the Union Aluminum Co., Inc., Sheffield, Alabama.

### MATERIAL

All sections shall be  $\frac{1}{8}$ " thickness. Ventilator sections shall be  $1\frac{5}{8}$ " deep and frame sections shall be  $4\frac{1}{2}$ " deep and channel reinforced. The drip section shall be extruded integral in the head section, forming a watershed. Windows shall be constructed of extruded aluminum alloy 6063-T5 and having a tensile strength of about 22,000 pounds per square inch.

### CONSTRUCTION

Ventilators shall be mortise and tenon and securely riveted at all corners. Frame sections shall be capped and corners secured with 3 #10 sheet metal screws  $\frac{7}{8}$ " long at each and every corner. Frame head and sill sections shall be continuous over entire opening up to 12 feet maximum length. Frame head sections shall support entire weight of glass blocks, eliminating lintel.

### VENTILATORS

Ventilators shall have continuous two contact-weathering. Ventilators may project-in or out in ribbon or individual glass block window as specified.

### HARDWARE

Cam handle or spring catch hardware is optional on project-in types. Project-out types cam handle or ring type cam handle hardware shall be furnished. All hardware shall be of white bronze-clear lacquer finished.

### SCREENS

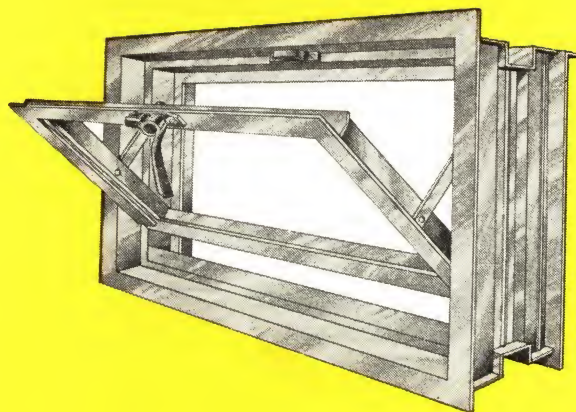
Windows shall be prepared for screens at additional cost. Screens for project-out vents are mounted inside and project-in vents are screen mounted on the outside. (Removable from inside). Screens shall be of extruded aluminum frame with 14x18 mesh screen cloth mounted.

### MULLION

Mullion shall be variable from  $2\frac{3}{16}$ " minimum to  $2\frac{9}{16}$ " maximum. Mullion shall be mechanically fitted to eliminate the use of screws and nuts.

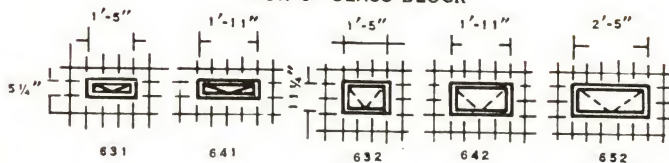
### GLAZING

Project-out and project-in windows shall be glazed on the outside.

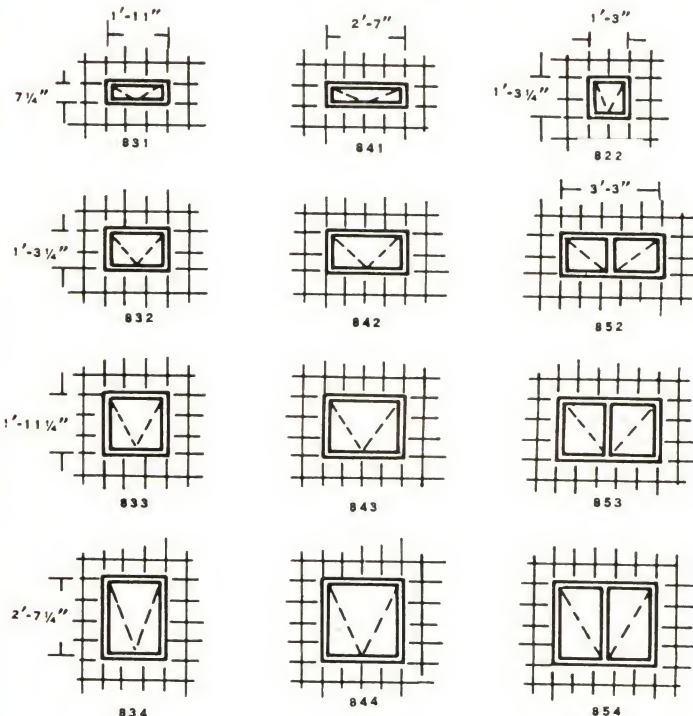


### GLASS BLOCK WINDOW SIZES

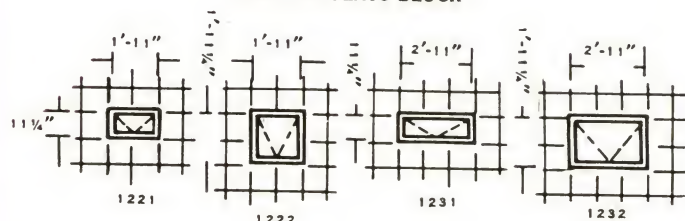
#### FOR 6" GLASS BLOCK



#### FOR 8" GLASS BLOCK



#### FOR 12" GLASS BLOCK



### GLASS SCHEDULE

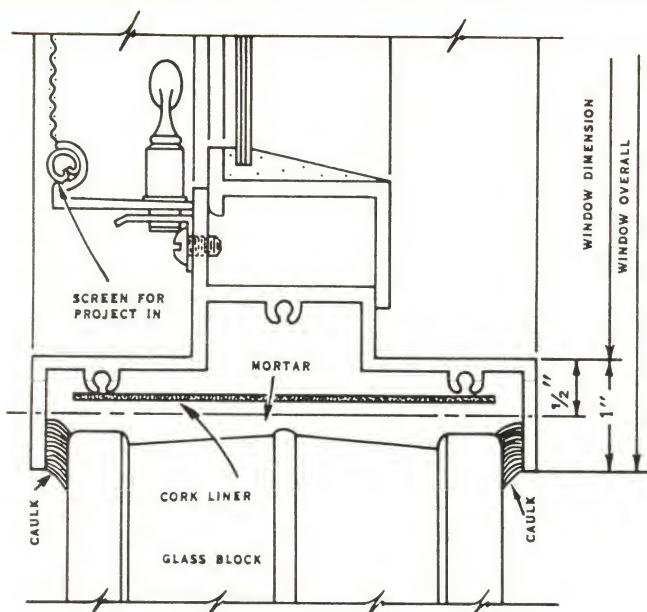
A	13 $\frac{3}{4}$ "	1 $\frac{7}{8}$ "
B	19 $\frac{3}{4}$ "	1 $\frac{7}{8}$ "
C	13 $\frac{3}{4}$ "	7 $\frac{7}{8}$ "
D	19 $\frac{3}{4}$ "	7 $\frac{7}{8}$ "
E	25 $\frac{3}{4}$ "	7 $\frac{7}{8}$ "
F	19 $\frac{3}{4}$ "	3 $\frac{7}{8}$ "
G	27 $\frac{3}{4}$ "	3 $\frac{7}{8}$ "
H	19 $\frac{3}{4}$ "	11 $\frac{7}{8}$ "
I	11 $\frac{3}{4}$ "	11 $\frac{7}{8}$ "
J	27 $\frac{3}{4}$ "	11 $\frac{7}{8}$ "
K	17 $\frac{5}{8}$ "	11 $\frac{7}{8}$ "
L	19 $\frac{3}{4}$ "	19 $\frac{7}{8}$ "
M	27 $\frac{3}{4}$ "	19 $\frac{7}{8}$ "
N	17 $\frac{5}{8}$ "	19 $\frac{7}{8}$ "
O	19 $\frac{3}{4}$ "	27 $\frac{7}{8}$ "
P	27 $\frac{3}{4}$ "	27 $\frac{7}{8}$ "
Q	17 $\frac{5}{8}$ "	27 $\frac{7}{8}$ "
R	19 $\frac{3}{4}$ "	7 $\frac{7}{8}$ "
S	31 $\frac{3}{4}$ "	7 $\frac{7}{8}$ "
T	31 $\frac{3}{4}$ "	19 $\frac{7}{8}$ "

FIXED AND PICTURE WINDOWS  
ALSO AVAILABLE

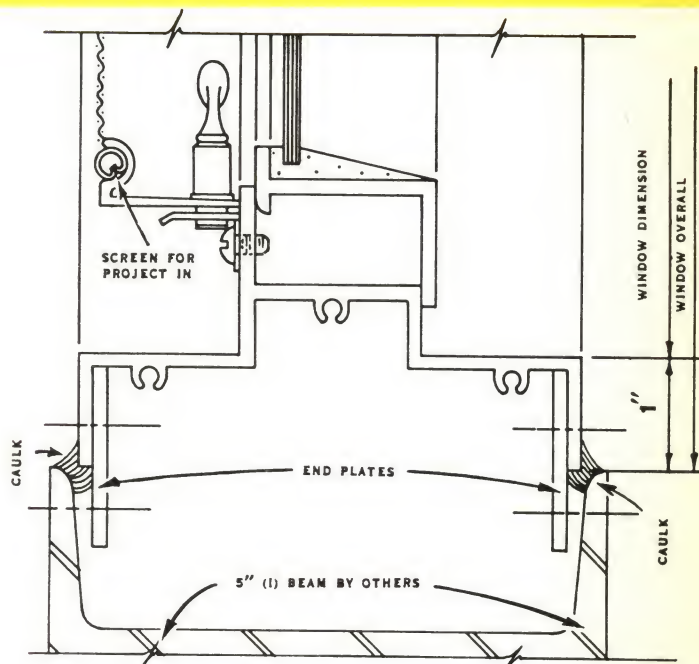




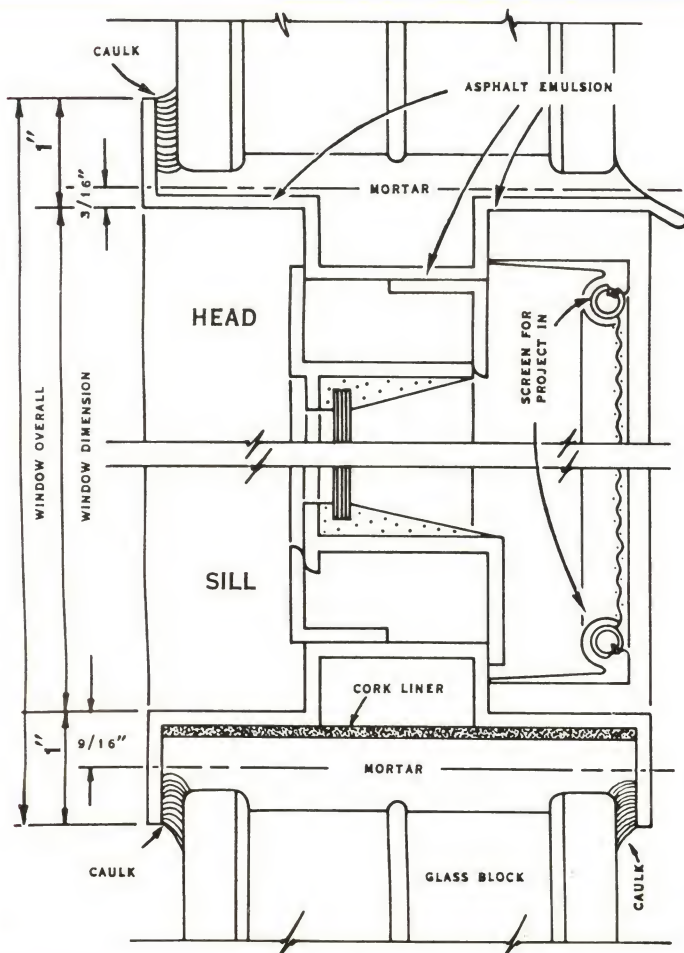
(SECTIONAL DETAILS)  
GLASS BLOCK WINDOW



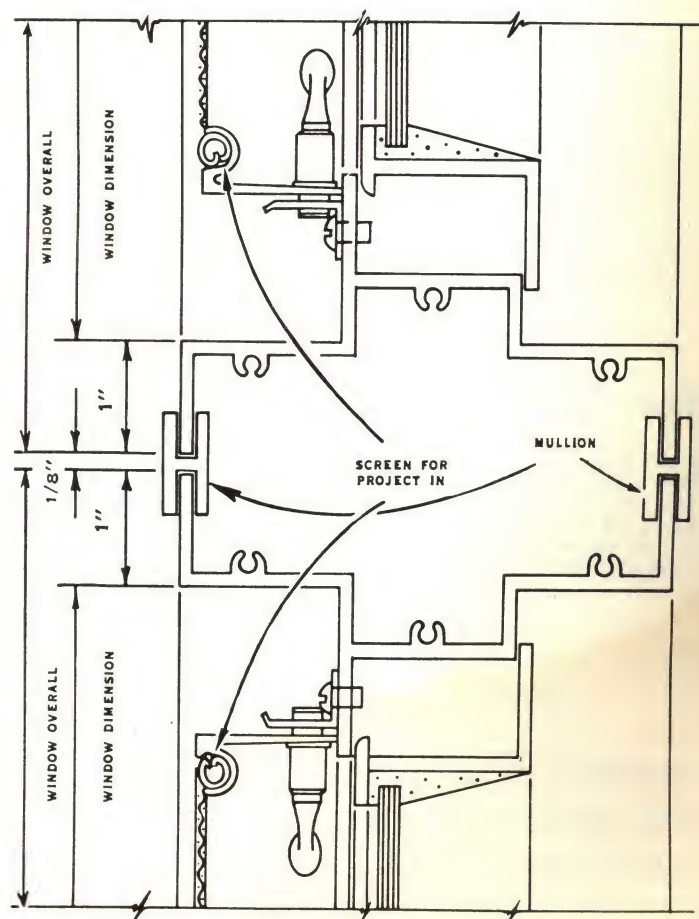
GLASS BLOCK WINDOW JAMB DETAIL  
AT GLASS BLOCK



GLASS BLOCK WINDOW JAMB DETAIL  
AT 5" (1) BEAM

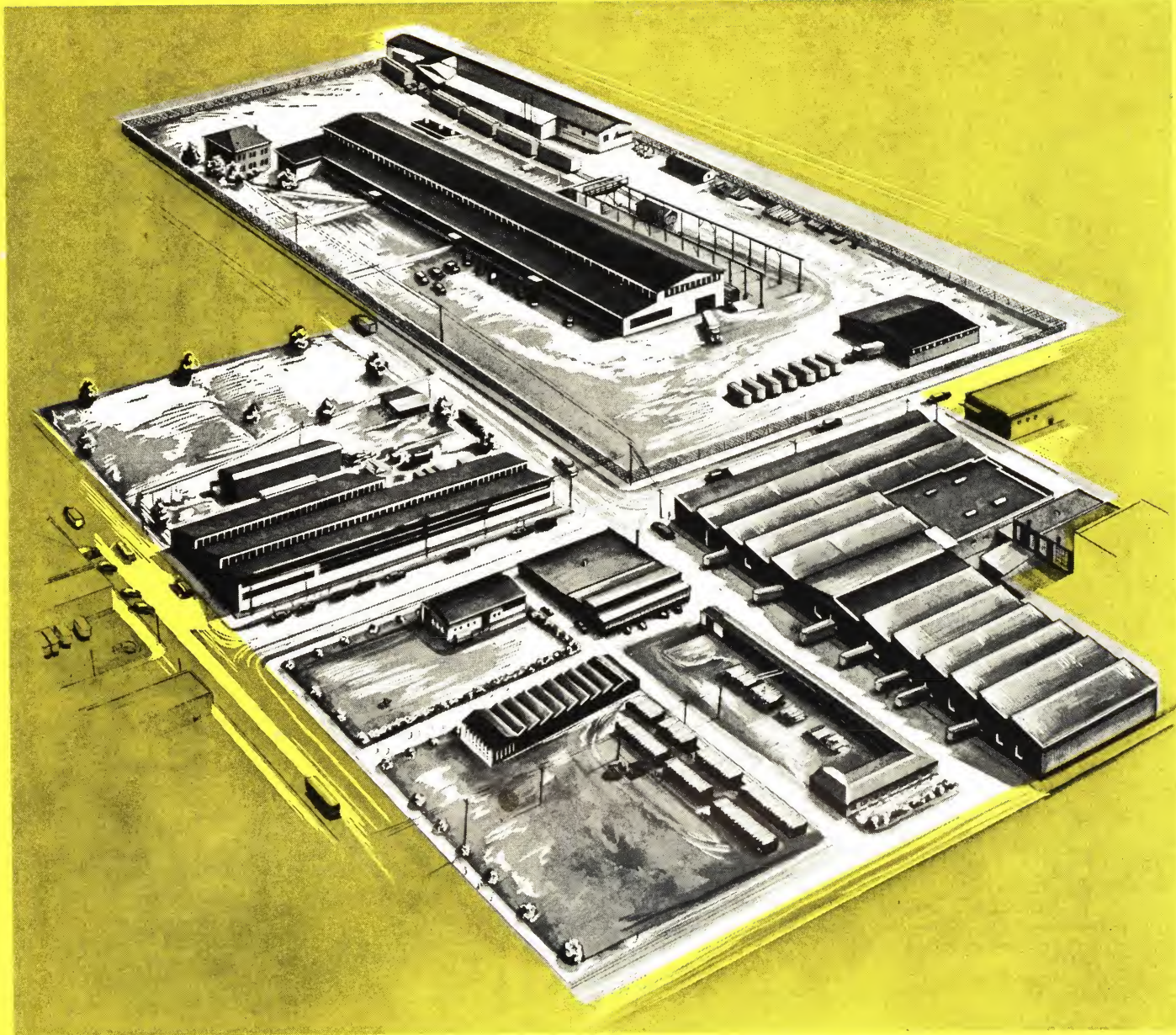


GLASS BLOCK INSTALLATION



TYPICAL MULLION JAMB SECTION  
P. O. & P. I.





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There is one undeniable reason for Ualco's being the world's largest manufacturer of aluminum windows. That reason is **UALCO'S UNSURPASSED QUALITY and COMPLETE LINE OF WINDOWS!** When you specify Ualco, you can be sure you're selecting windows with heavier extruded sections which have greater tensile strength . . . finest operating

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*Windows*

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